



スモールツール用



# MEGACOATシリーズ

MEGACOAT Series for small parts cutting

## 鋼加工の第一推奨

For Steel Cutting

MEGACOAT NANO **PR1425**

特殊ナノ積層コーティングで、  
高速加工対応・長寿命

High speed and long tool life with Special Multilayer Nano Coating

## ステンレス鋼加工の第一推奨

For Stainless Steel Cutting

MEGACOAT **PR1225**

被膜密着性を向上した独自薄膜技術で安定加工

Stable cutting with Kyocera's unique thin coating technology for improved bonding force



**自動盤用ネガシリーズ**  
Double Sided Tooling for Automatic Lathes



**SK** ブレーカ登場  
SK chipbreaker now available

ADVANCING PRODUCTIVITY

生産性向上に貢献する京セラ

研磨ブレードは  
価格そのまま  
E-classにグレードアップ  
E-class tolerance inserts  
at reasonable prices

鋼加工の  
第一推奨  
First Choice for  
Steel Cutting

# MEGACOAT NANO PR1425

特殊ナノ積層コーティング「MEGACOAT NANO」の採用で  
鋼の幅広い加工領域で優れた切削性能を発揮  
Superior performance in various applications of steel cutting by Special Multilayer  
Nano Coating "MEGACOAT NANO"

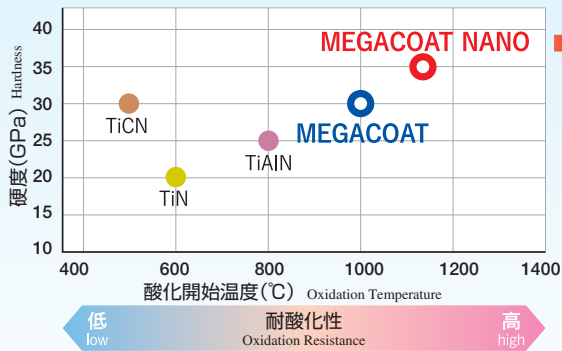
ステンレス  
鋼加工の  
第一推奨  
First Choice for  
Stainless Steel Cutting

# MEGACOAT PR1225

被膜密着性を向上した、独自薄膜技術と表面平滑性を高め  
ステンレス鋼の加工に威力を発揮  
Kyocera's unique Coating Technology for improved bonding force and surface  
smoothness enables excellent performance in stainless steel cutting.

## 長寿命加工を実現する2つのメガコート

Two types of MEGACOAT for Long Tool Life



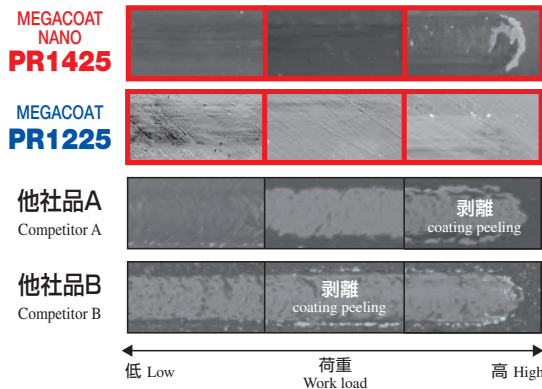
特殊ナノ積層コーティング被膜断面  
Cross-section: Special Multilayer Nano Coating



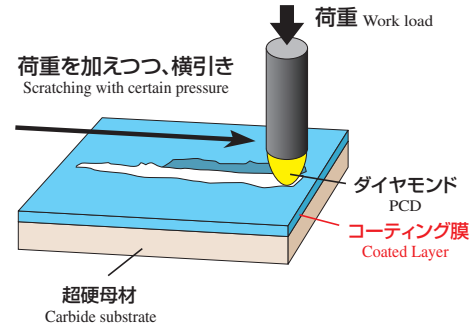
MEGACOAT NANOは、高硬度(35GPa)と優れた耐酸化性(酸化開始温度:1150°C)が摩耗を抑制し、耐チッピング性能も向上  
MEGACOAT NANO prevents wear and fracture with high hardness (35GPa) and superior oxidation resistance (oxidation temperature: 1,150°C)

## 高い膜密着強度で、自動盤で求められる安定加工を実現

Stability required in automatic lathe cutting and high bonding force

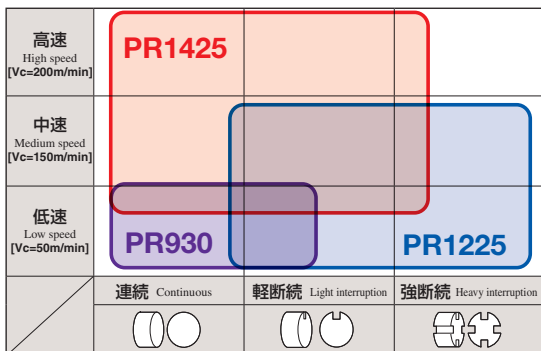


測定方法 Measurement



### 適応材種マップ Application range

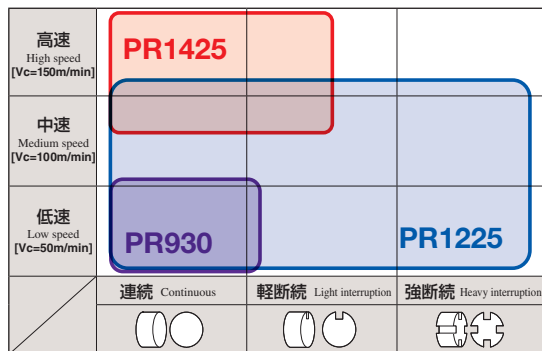
鋼 Steel



第一推奨材種:PR1425 1st recommended grade

- 断続加工における高信頼性:PR1225 High reliability in interrupted cutting
- 低~中速域の安定加工:PR1225 Stable cutting at low to middle speed
- 低速域の安定加工:PR930 Stable cutting at low speed

ステンレス鋼 Stainless steel



第一推奨材種:PR1225 1st recommended grade

- 高速域の長寿命化:PR1425 Extended tool life in high speed cutting
- 低速域の長寿命化:PR930 Extended tool life in low speed cutting

# 切りくず処理の悩みを解決！ 加工に合わせて選べる3つの選択肢

3 types of chipbreakers as solutions for chip evacuation problems

## 3次元シャープエッジブレイカシリーズ

Molded sharp edge chipbreakers

優れた切りくず処理性能  
Excellent chip evacuation

ポイント1  
Point 1

新開発3次元ブレイカシリーズの完成で、広範な加工領域において良好な切りくず処理性能を発揮

New chipbreaker series delivers excellent chip control in a wide range of cutting.

ポイント2  
Point 2

精密外周研削及びシャープエッジ仕様の切れ味効果で高精度加工に対応

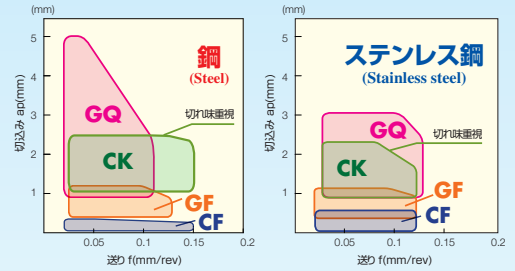
Sharp cutting with ground edge periphery in high precision

ポイント3  
Point 3

鏡面仕様の採用で耐溶着性、仕上面が向上

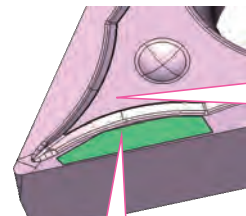
The mirror polished insert provides improved adhesion resistance and surface finish.

・ブレイカマップ Chipbreaker Application Map



切込み  $ap=0.8\sim 5\text{mm}$  (鋼)、  
 $ap=0.8\sim 3\text{mm}$  (ステンレス鋼) の広範な領域に対応  
Available in wide range of application:  $ap=0.8\sim 5\text{mm}$ (steel),  $ap=0.8\sim 3\text{mm}$ (stainless steel)

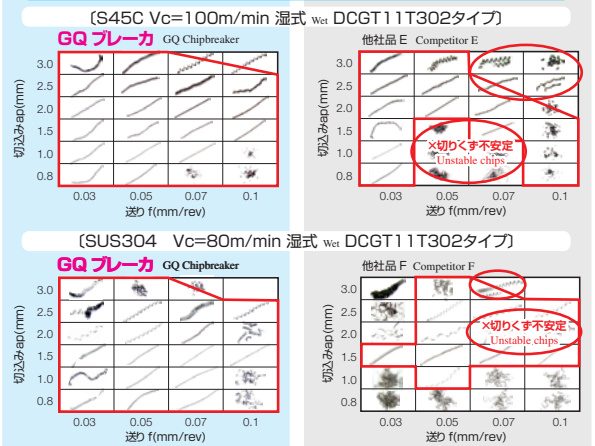
低～高  
切込み対応  
**GQ**  
ブレイカ  
Applicable to both  
small and large ap



- ・低いブレイカ段差による低抵抗設計  
Low cutting force design with small chipbreaker gap
- ・先端まで突出したドットにより低切込みでの切りくず処理を実現  
Achieves chip control at low ap with a dot that overhangs to the edge

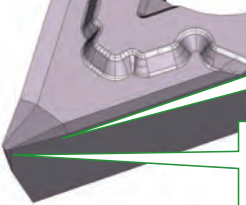
- ・切込み範囲に合わせた最適なブレイカ幅の採用により、広範囲条件での切削が可能  
Enables cutting over a wide range of conditions by using the optimum chipbreaker width according to the cutting depth

### 切りくず処理比較 Chip Evacuation Comparison



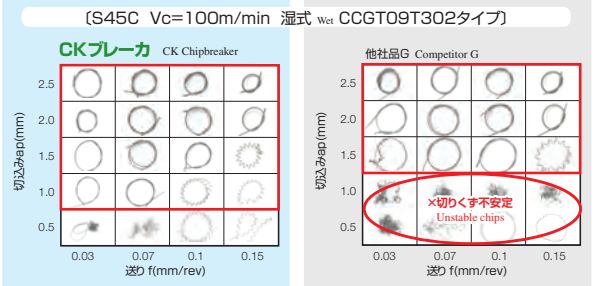
切込み  $1.0\sim 2.5\text{mm}$  に対応  
Applicable ap range from 1.0 to 2.5mm

切れ味重視  
**CK**  
ブレイカ  
For sharp  
cutting



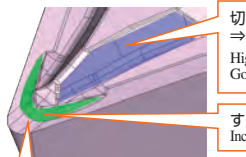
- ・中央部に向かうにつれて切れ刃が下がることにより、切削抵抗を大きく低減  
Slant cutting edge design reduces cutting force greatly

- ・大きなすくい角で切削抵抗を低減。安定した長い切りくずを排出  
Large rake angle reduces cutting force. Long chips in stable conditions.



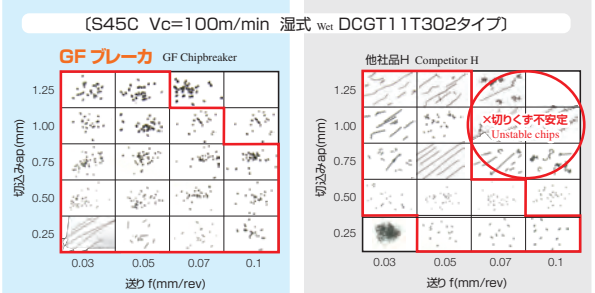
切込み  $ap=0.25\sim 1.25\text{mm}$  に対応  
Applicable ap range from 0.25 to 1.25mm

仕上用  
**GF**  
ブレイカ  
For finishing



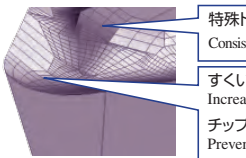
- ・切れ刃稜線から離れた高いドット  
⇒高切込み条件で切りくず詰まり、焼けを軽減する  
High breaker dot apart from ridge line of cutting edge  
Good heat resistance and chip control in cutting of high ap
- ・すくい角を大きく取り、切れ味をUP  
Increase sharpness through the use of a large rake angle

- ・コーナ部、切れ刃稜線近くまで伸びたドット⇒低切込み条件で切りくずを細かく分断  
Dot located close to ridge line of cutting edge on corner  
Chips fragmented in small pieces in cutting of small ap



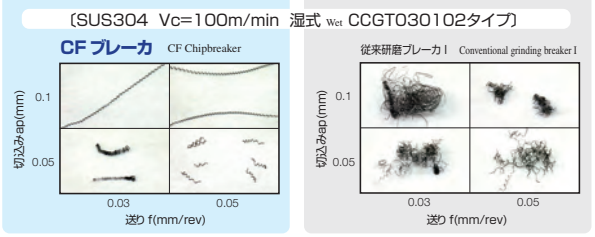
切込み  $ap=0.02\sim 0.2\text{mm}$  に対応  
Applicable ap range from 0.02 to 0.2mm

微小  
切込み対応  
**CF**  
ブレイカ  
Applicable to  
minute ap



- ・特殊ドットにより、安定して切りくずをカールさせる  
Consistent curled chips through the use of special dots

- ・すくい角を大きく取り、切れ味をUP  
Increase sharpness by large rake angle
- ・チップへの溶着を防止し、ワークのバリ・白濁面を抑制  
Prevents workpiece adhesion and reduces burrs



ますます広がるメガコートシリーズ  
Expanding MEGACOAT Series



3ページをチェック!!  
See page 3

# 自動盤用スモールネガシリーズ

Small Double-Sided Tooling for Automatic Lathes

Φ6以上のワークに最適  
For workpiece diameter over 6mm

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小径ワークに特化した専用設計ネガチップ

ポジに匹敵する切れ味を実現しながら、コーナ数2倍でハイコストパフォーマンスを実現

Specially designed economical double-sided insert for small diameter workpieces  
Sharp cutting equivalent to positive inserts and economical double edge numbers

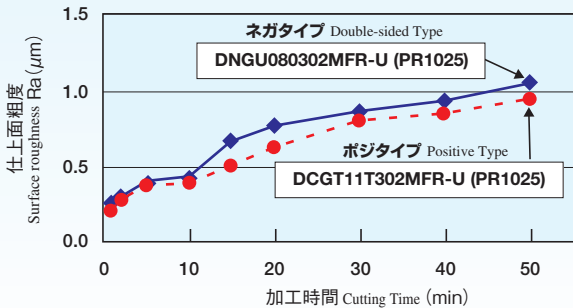


- ポイント1** Point 1 自動盤加工に適したネガチップを開発  
Newly developed double-sided inserts optimized for automatic lathes
- ポイント2** Point 2 研磨ブレーカ、3次元ブレーカをレパートリー仕上げ～荒加工まで幅広く対応可能  
Ground and mold chipbreakers are available. Applicable for roughing to finishing
- ポイント3** Point 3 G級(研磨級)のコーナR( $r\epsilon$ )寸法公差はマイナス公差を使用  
Corner R of ground chipbreakers are minus tolerance.

## ■仕上面粗度比較(シャープエッジ仕様)

Surface roughness comparison (sharp edge)

ポジチップに匹敵する切れ味で、優れた仕上げ面粗度  
Sharp cutting equivalent to positive inserts and excellent surface roughness

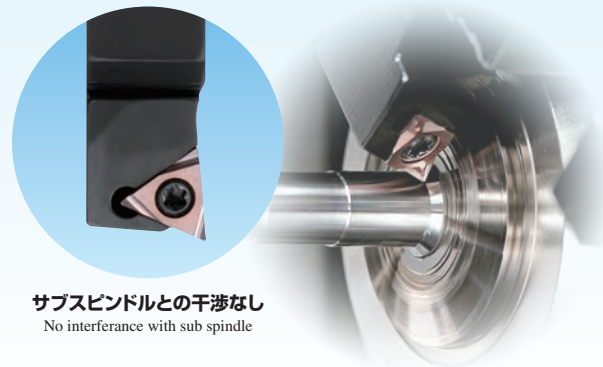


<切削条件 Cutting Condition>

被削材 Workpiece Material :S45C Vc=100m/min, ap=1.5mm f=0.03mm/rev 湿式 Wet

## ■ホルダはオフセットなし

Toolholder without offset



# 自動盤用ネガシリーズ

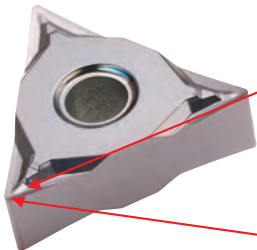
Double Sided Tooling for Automatic Lathes

Φ16以上のワークに最適  
For workpiece diameter over 16mm

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## 切れ味と切りくず処理を両立する SKブレーカ

SK chipbreaker for sharpness and better chip control

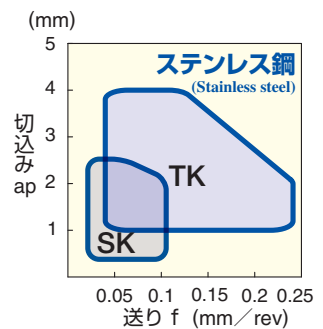
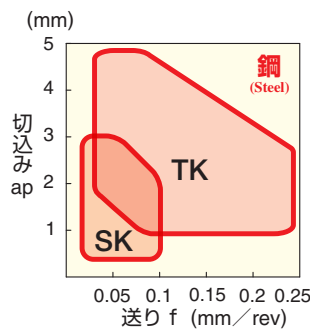


自動盤専用ブレーカ設計により幅広い範囲で切りくず処理良好

Smooth chip control in wide application range due to special chipbreaker design for automatic lathe

シャープエッジで良好な切れ味  
ノーズR0.1からのレパートリー

Excellent sharpness. Available from nose R 0.1



## 鏡面シャープエッジ 3次元G級TKブレーカ

Polished face and sharp edge TK Chipbreaker: Economical double-sided molded Chipbreaker with G-class accuracy

鏡面仕様で優れた耐溶着性

Superior adhesion resistant polished surface

シャープエッジで良好な切れ味

Smooth cutting with sharp edge



ドットレスブレーカ構造で低抵抗  
切込み1~5mmに幅広く対応

Low cutting resistant structure without dots on chipbreaker Available in a wide range of ap:1~5mm



オフセットなしホルダ  
Without offset

シャンク角 16×20 に加え  
20×20 をラインナップ  
In addition to 16x20mm, 20x20mm square shanks are added to the lineup

## 突切り・あとびき・ねじ切り KTKF型

KTKF for Cut-off, Back Turning and Threading

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## あとびき ABS/ABW型

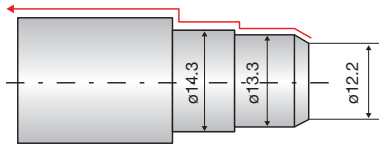
ABS/ABW for Back Turning

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## SUJ2

シリンダ Cylinder

- ・Vc= 208~225m/min
- ・ap= 1.0mm(外径)External turning
- ・f= 0.12mm/rev(外径)External turning
- ・湿式 Wet
- ・DCGT11T302MFP-GF (PR1425)



PR1425

700 個 / コーナ  
700pcs/edge

他社品I  
(3次元ブレイカ・PVDコーティング)  
Competitor I  
(Molded Chipbreaker / PVD Coated)

250 個 / コーナ  
250pcs/edge

PR1425は他社品I(3次元ブレイカ・PVDコーティング)に対し、  
工具寿命が2.8倍に向上した。  
他社品I Vc=188~200m/min

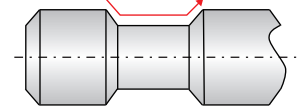
PR1425 achieved 2.8 times longer tool life than the competitor I (Molded Chipbreaker / PVD Coated). Competitor I Vc=188~200m/min

(ユーザー様の評価による) Evaluation by the user

## S45C

シャフト Shaft

- ・Vc= 205m/min
- ・ap= ~1.5mm
- ・f=0.1mm/rev
- ・湿式 Wet
- ・DCGT11T304MFP-GQ (PR1425)



PR1425

2,000 個以上 / コーナ  
More than 2000 pcs/edge

他社品J  
(3次元ブレイカ・PVDコーティング)  
Competitor J  
(Molded Chipbreaker / PVD Coated)

800 個未満 / コーナ  
Less than 800 pcs/edge

PR1425は他社品J(3次元ブレイカ・PVDコーティング)に対し、  
工具寿命が2.5倍に向上した。

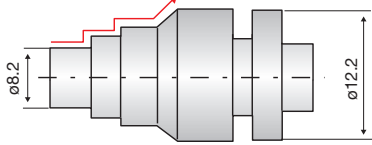
PR1425 achieved 2.5 times longer tool life than the competitor J (Molded Chipbreaker / PVD Coated)

(ユーザー様の評価による) Evaluation by the user

## SUS304

フランジ Flange

- ・Vc= 85m/min
- ・ap= ~1.5mm
- ・f=0.02~0.05mm/rev
- ・湿式 Wet
- ・DCGT11T302MFP-GQ (PR1225)



PR1225

14,500 個 / コーナ  
14,500pcs/edge

他社品K  
(3次元ブレイカ・PVDコーティング)  
Competitor K  
(Molded Chipbreaker / PVD Coated)

4,000 個 / コーナ  
4,000pcs/edge

PR1225は他社品K(3次元ブレイカ・PVDコーティング)に対し、  
加工数が3.6倍に向上した。

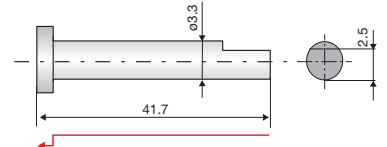
PR1225 increased 3.6 times as many workpieces, compared to Competitor K (Molded Chipbreaker / PVD Coated).

(ユーザー様の評価による) Evaluation by the user

## SUS440C

クラッチ軸 Clutch shaft

- ・Vc= 60m/min
- ・ap=0.25~1.3mm
- ・f=0.03mm/rev
- ・湿式 Wet
- ・CCGT0602005MFR-U (PR1225)



PR1225

400 ~ 450 個 / コーナ  
400~450pcs/edge

他社品L  
(研磨ブレイカ・PVDコーティング)  
Competitor L  
(Ground chipbreaker / PVD Coated)

250 ~ 300 個 / コーナ  
250~300pcs/edge

平カット部分があるので一部断続加工。

PR1225は他社品L(研磨ブレイカ・PVDコーティング)に対し、  
加工数が1.5倍以上向上した。

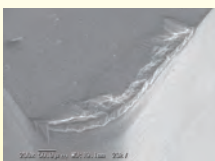
Because of flat cut, partially interrupted cutting

PR1225 increased 1.5 times as many workpieces, compared to Competitor L (Ground chipbreaker / PVD Coated).

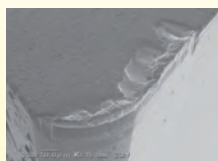
(ユーザー様の評価による) Evaluation by the user

### ワンポイントアドバイス Technical Tips

快削鋼の加工には  
PR1425とJブレイカの組み合わせがベストマッチ  
For free-cutting steel, the best combination is PR1425 with J Chipbreaker.



PR1425



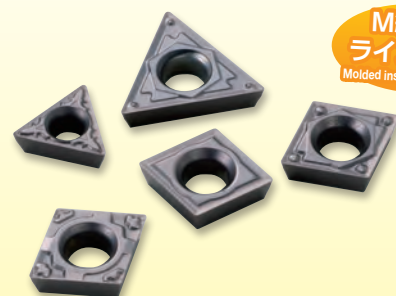
他社品 Competitor

切削条件 Cutting Condition Vc=120m/min ap=0.5mm f=0.04mm/rev  
被削材 Workpiece Material SUM24L Wet 加工時間 Cutting Time 150分

クレータ摩耗・刃先溶着少なく良好な切刃  
Maintained good edge condition with less crater wear and built-up edge

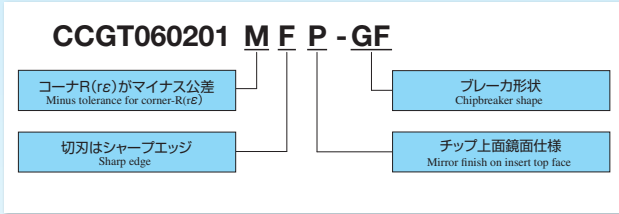
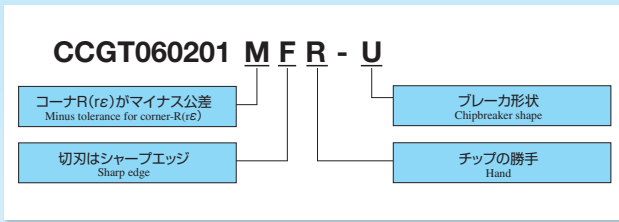
### ワンポイントアドバイス Technical Tips

大型から中型のワーク(自動車部品など)、  
内径仕上げ加工でも、PR1425は長寿命  
PR1425 extended tool life in large diameter workpiece cutting



M級品も  
ラインナップ  
Molded inserts also available

● ポジチップの表示例 Positive Insert Identification System



◆ コーナR (rε) がマイナス公差の使い方

Use of minus tolerance for corner-R(rε)

加工図面中に図1のような隅部Rが指示されている場合、コーナR (rε)=0.2mmのチップを使用しますと、隅部Rが大きくなる可能性があります。

The actual corner-R of the workpiece may become larger than R0.2mm when machined by the insert whose corner-R(rε) is 0.2.

In such case, insert with minus tolerance for corner-R(rε) is recommended.

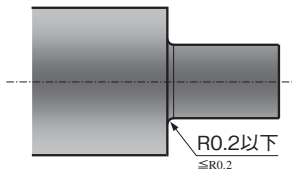


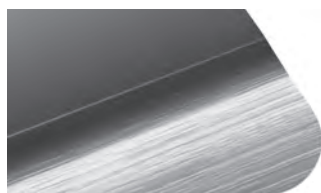
図1 加工図面中の隅部R指示例  
Fig. 1 Corner-R on the drawing

● 高品位研磨チップ“スーパーファイン”  
"Super Fine" Edge for High Quality and Long Tool Life

- メカトロニクス、エレクトロニクス、高精度部品加工に適応  
Recommended for mechatronics, electronics and high precision machined parts
- サブミクロンの精度要求に対応  
Sub-micron accuracy possible

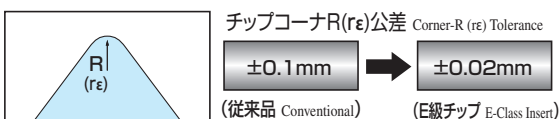
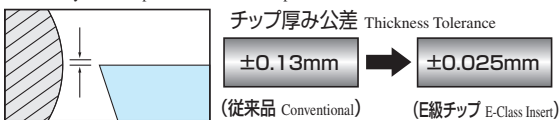
高品位研磨チップ High Quality Ground Insert

- 刃先研磨時のマイクロチップングを減少  
Reduction of micro-chipping at ground edge
- 溶着減少 Less edge build-up
- 刃先寿命延長 Long tool life





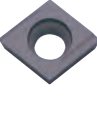

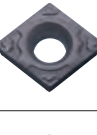



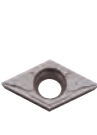


旋削用E級チップ E-class Turning Insert






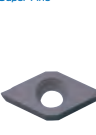


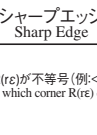
- チップ交換時の刃先位置、高さ一定化  
Accuracy of index position after insert replacement



標準在庫型番(ポジ) Stock Items(Positive)

| 形状<br>Shape  | 型番<br>Description  | 寸法(mm)<br>Dimension(mm) |                 |                               |                               |                        | 材種<br>Grades |        |   |
|--|--|-------------------------|-----------------|-------------------------------|-------------------------------|------------------------|--------------|--------|---|
|  |  | 内接<br>円径<br>I.C.        | 厚み<br>Thickness | 穴径<br>Hole                    | コーナR<br>Corner-<br>R(rε)      | 逃げ角<br>Relief<br>Angle | PR1425       | PR1225 |   |
| 微小<br>切込み<br>Minute ap<br>Minute ap                                | CCGT 030101MP-CF<br>030102MP-CF                                    | 3.5                     | 1.4             | 1.9                           | <0.1<br><0.2                  | 7°                     | ●            | ●      |   |
|  | CCGT 040101MP-CF<br>040102MP-CF                                    | 4.3                     | 1.8             | 2.3                           | <0.1<br><0.2                  |                        | ●            | ●      |   |
|  | CCGT 060201MFP-GF<br>060202MFP-GF<br>060204MFP-GF                  | 6.35                    | 2.38            | 2.8                           | <0.1<br><0.2<br><0.4          |                        | ●            | ●      |   |
| 仕上げ<br>Finishing   | CCGT 09T301MFP-GF<br>09T302MFP-GF<br>09T304MFP-GF                  | 9.525                   | 3.97            | 4.4                           | <0.1<br><0.2<br><0.4          | 7°                     | ●            | ●      |   |
|  | CCGT 060201MP-CK<br>060202MP-CK                                    | 6.35                    | 2.38            | 2.8                           | <0.1<br><0.2                  |                        | 7°           | ●      | ● |
|  | CCGT 09T301MP-CK<br>09T302MP-CK                                    | 9.525                   | 3.97            | 4.4                           | <0.1<br><0.2                  |                        |              | ●      | ● |
| 仕上げ<br>中<br>Finishing-Medium                                       | CCGT 060201MFP-GQ<br>060202MFP-GQ<br>060204MFP-GQ                  | 6.35                    | 2.38            | 2.8                           | <0.1<br><0.2<br><0.4          | 7°                     | ●            | ●      |   |
|  | CCGT 09T301MFP-GQ<br>09T302MFP-GQ<br>09T304MFP-GQ                  | 9.525                   | 3.97            | 4.4                           | <0.1<br><0.2<br><0.4          |                        | ●            | ●      |   |
|  | CCMT 060202GK<br>060204GK  | 6.35                    | 2.38            | 2.8                           | 0.2<br>0.4                    |                        | 7°           | ●      | ● |
| CCMT 09T302GK<br>09T304GK  | 9.525  | 3.97                    | 4.4             | 0.2<br>0.4                    | ●                             | ●                      |              |        |   |
| 仕上げ<br>中<br>Finishing-Medium                                       | CCMT 060202HQ<br>060204HQ  | 6.35                    | 2.38            | 2.8                           | 0.2<br>0.4                    | 7°                     | ●            | ●      |   |
|  | CCMT 09T302HQ<br>09T304HQ<br>09T308HQ                              | 9.525                   | 3.97            | 4.4                           | 0.2<br>0.4<br>0.8             |                        | ●            | ●      |   |
|  | CCMT 09T308  | 9.525                   | 3.97            | 4.4                           | 0.8                           |                        | 7°           | ●      | ● |
| 中<br>切削<br>Medium cutting  | CCGT 0602005MF<br>060201MF<br>060202MF<br>060204MF                 | 6.35                    | 2.38            | 2.8                           | <0.05<br><0.1<br><0.2<br><0.4 | 7°                     | ●            | ●      |   |
|  | CCGT 09T3005MF<br>09T301MF<br>09T302MF<br>09T304MF                 | 9.525                   | 3.97            | 4.4                           | <0.05<br><0.1<br><0.2<br><0.4 |                        | ●            | ●      |   |
|  | CCET 0301005M%-FSF<br>030101M%-FSF<br>030102M%-FSF<br>030104M%-FSF | 3.5                     | 1.4             | 1.9                           | <0.05<br><0.1<br><0.2<br><0.4 |                        | 7°           | ●      | ● |
| CCET 0401005M%-FSF<br>040101M%-FSF<br>040102M%-FSF<br>040104M%-FSF | 4.3  | 1.8                     | 2.3             | <0.05<br><0.1<br><0.2<br><0.4 | ●                             | ●                      |              |        |   |
| 仕上げ<br>Finishing   | CCET 0301005M%-F<br>030101M%-F<br>030102M%-F<br>030104M%-F         | 3.5                     | 1.4             | 1.9                           | <0.05<br><0.1<br><0.2<br><0.4 | 7°                     | ●            | ●      |   |
|  | CCET 040101M%-F<br>040102M%-F<br>040104M%-F                        | 4.3                     | 1.8             | 2.3                           | <0.1<br><0.2<br><0.4          |                        | ●            | ●      |   |
|  | CCGT 0301005M%-F<br>030101M%-F<br>030102M%-F<br>030104M%-F         | 3.5                     | 1.4             | 1.9                           | <0.05<br><0.1<br><0.2<br><0.4 |                        | 7°           | ●      | ● |
| CCGT 0401005M%-F<br>040101M%-F<br>040102M%-F<br>040104M%-F         | 4.3  | 1.8                     | 2.3             | <0.05<br><0.1<br><0.2<br><0.4 | ●                             | ●                      |              |        |   |

| 形状<br>Shape                  | 型番<br>Description  | 寸法(mm)<br>Dimension(mm) |                 |            |                          |                        | 材種<br>Grades |        |    |       |      |       |      |     |     |
|------------------------------|--|-------------------------|-----------------|------------|--------------------------|------------------------|--------------|--------|----|-------|------|-------|------|-----|-----|
|                              |  | 内接<br>円径<br>I.C.        | 厚み<br>Thickness | 穴径<br>Hole | コーナー<br>Corner-<br>R(re) | 逃げ角<br>Relief<br>Angle | PR1425       | PR1225 |    |       |      |       |      |     |     |
|                              |  |                         |                 |            |                          |                        |              |        |    |       |      |       |      |     |     |
| 低送り<br>Low Feed              | <br>スーパーファイン<br>Super Fine  | CCET 0602005MF%-USF     | 6.35            | 2.38       | 2.8                      | <0.05                  | 7°           | ●      | ●  |       |      |       |      |     |     |
|                              |  | 060201MF%-USF           |                 |            |                          | <0.1                   |              |        |    |       |      |       |      |     |     |
|                              |  | 060202MF%-USF           |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | CCET 09T3005MF%-USF     | 9.525           | 3.97       | 4.4                      | <0.05                  |              |        |    | ●     | ●    |       |      |     |     |
|                              |  | 09T301MF%-USF           |                 |            |                          | <0.1                   |              |        |    |       |      |       |      |     |     |
|                              |  | 09T302MF%-USF           |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
| 低送り<br>Low Feed              | <br>シャープエッジ<br>Sharp Edge   | CCET 0602005MF%-U       | 6.35            | 2.38       | 2.8                      | <0.05                  | 7°           | ●      | ●  |       |      |       |      |     |     |
|                              |  | 060201MF%-U             |                 |            |                          | <0.1                   |              |        |    |       |      |       |      |     |     |
|                              |  | 060202MF%-U             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | CCET 09T3005MF%-U       | 9.525           | 3.97       | 4.4                      | <0.05                  |              |        |    | ●     | ●    |       |      |     |     |
|                              |  | 09T301MF%-U             |                 |            |                          | <0.1                   |              |        |    |       |      |       |      |     |     |
|                              |  | 09T302MF%-U             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
| 低送り<br>Low Feed              | <br>シャープエッジ<br>Sharp Edge   | CCGT 0602005MF%-U       | 6.35            | 2.38       | 2.8                      | <0.05                  | 7°           | ●      | ●  |       |      |       |      |     |     |
|                              |  | 060201MF%-U             |                 |            |                          | <0.1                   |              |        |    |       |      |       |      |     |     |
|                              |  | 060202MF%-U             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | CCGT 09T3005MF%-U       | 9.525           | 3.97       | 4.4                      | <0.05                  |              |        |    | ●     | ●    |       |      |     |     |
|                              |  | 09T301MF%-U             |                 |            |                          | <0.1                   |              |        |    |       |      |       |      |     |     |
|                              |  | 09T302MF%-U             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
| 低送り<br>Low Feed              | <br>シャープエッジ<br>Shape Edge | CCET 0602005MF%-J       | 6.35            | 2.38       | 2.8                      | <0.05                  | 7°           | R      | R  |       |      |       |      |     |     |
|                              |  | 060201MF%-J             |                 |            |                          | <0.1                   |              |        |    |       |      |       |      |     |     |
|                              |  | 060202MF%-J             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | CCET 09T301MF%-J        | 9.525           | 3.97       | 4.4                      | <0.1                   |              |        |    | ●     | ●    |       |      |     |     |
|                              |  | 09T302MF%-J             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | 09T304MF%-J             |                 |            |                          | <0.4                   |              |        |    |       |      |       |      |     |     |
| 仕上げ<br>Finishing             | <br>シャープエッジ<br>Sharp Edge | CPMT 080204GP           | 7.94            | 2.38       | 3.3                      | 0.4                    | 11°          | ●      | ●  |       |      |       |      |     |     |
|                              |  | CPMT 090304GP           |                 |            |                          |                        |              |        |    |       |      | 9.525 | 3.18 | 4.4 | 0.4 |
|                              |  | 090308GP                |                 |            |                          |                        |              |        |    |       |      |       |      |     |     |
| 仕上げ<br>中<br>Finishing-Medium | <br>シャープエッジ<br>Sharp Edge | CPMH 080204HQ           | 7.94            | 2.38       | 3.5                      | 0.4                    | 11°          | ●      | ●  |       |      |       |      |     |     |
|                              |  | 080208HQ                |                 |            |                          |                        |              |        |    | 9.525 | 3.18 | 4.5   | 0.4  |     |     |
|                              |  | CPMH 090304HQ           |                 |            |                          |                        |              |        |    |       |      |       |      | 0.8 |     |
| 中切削<br>Medium Cutting        | <br>シャープエッジ<br>Sharp Edge | CPMH 080204             | 7.94            | 2.38       | 3.5                      | 0.4                    | 11°          | ●      | ●  |       |      |       |      |     |     |
|                              |  | 080208                  |                 |            |                          |                        |              |        |    | 9.525 | 3.18 | 4.5   | 0.4  |     |     |
|                              |  | CPMH 090304             |                 |            |                          |                        |              |        |    |       |      |       |      | 0.8 |     |
| 軟鋼<br>Low Carbon Steel       | <br>シャープエッジ<br>Sharp Edge | CPMT 080204XP           | 7.94            | 2.38       | 3.3                      | 0.4                    | 11°          | ●      | ●  |       |      |       |      |     |     |
|                              |  | CPMT 090304XP           |                 |            |                          |                        |              |        |    | 9.525 | 3.18 | 4.4   | 0.4  |     |     |
|                              |  | 090308XP                |                 |            |                          |                        |              |        |    |       |      |       |      | 0.8 |     |
| 微小切込み<br>Minute ap           | <br>シャープエッジ<br>Sharp Edge | DCGT 070201MP-CF        | 6.35            | 2.38       | 2.8                      | <0.1                   | 7°           | ●      | ●  |       |      |       |      |     |     |
|                              |  | 070202MP-CF             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | DCGT 11T301MP-CF        |                 |            |                          | <0.1                   |              |        |    |       |      |       |      |     |     |
| 仕上げ<br>Finishing             | <br>シャープエッジ<br>Sharp Edge | DCGT 070201MFP-GF       | 6.35            | 2.38       | 2.8                      | <0.1                   |              |        |    | 7°    | ●    | ●     |      |     |     |
|                              |  | 070202MFP-GF            |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | 070204MFP-GF            |                 |            |                          | <0.4                   |              |        |    |       |      |       |      |     |     |
|                              |  | DCGT 11T301MFP-GF       | 9.525           | 3.97       | 4.4                      | <0.1                   | ●            | ●      |    |       |      |       |      |     |     |
|                              |  | 11T302MFP-GF            |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | 11T304MFP-GF            |                 |            |                          | <0.4                   |              |        |    |       |      |       |      |     |     |
| 仕上げ<br>Finishing             | <br>シャープエッジ<br>Sharp Edge | DCGT 070201MP-CK        | 6.35            | 2.38       | 2.8                      | <0.1                   |              |        | 7° | ●     | ●    |       |      |     |     |
|                              |  | 070202MP-CK             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | DCGT 11T301MP-CK        |                 |            |                          | <0.1                   |              |        |    |       |      |       |      |     |     |
| 仕上げ<br>Finishing             | <br>シャープエッジ<br>Sharp Edge | DCGT 11T302MP-CK        | 9.525           | 3.97       | 4.4                      | <0.1                   | ●            | ●      |    |       |      | ●     |      |     |     |
|                              |  | 11T302MP-CK             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |
|                              |  | 11T302MP-CK             |                 |            |                          | <0.2                   |              |        |    |       |      |       |      |     |     |

| 形状<br>Shape                  | 型番<br>Description   | 寸法(mm)<br>Dimension(mm) |                 |            |                          |                        | 材種<br>Grades |        |   |      |     |     |
|------------------------------|---|-------------------------|-----------------|------------|--------------------------|------------------------|--------------|--------|---|------|-----|-----|
|                              |   | 内接<br>円径<br>I.C.        | 厚み<br>Thickness | 穴径<br>Hole | コーナー<br>Corner-<br>R(re) | 逃げ角<br>Relief<br>Angle | PR1425       | PR1225 |   |      |     |     |
|                              |   |                         |                 |            |                          |                        |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>シャープエッジ<br>Sharp Edge    | DCMT 070202GP           | 6.35            | 2.38       | 2.8                      | 0.2                    | 7°           | ●      | ● |      |     |     |
|                              |   | 070204GP                |                 |            |                          | 0.4                    |              |        |   |      |     |     |
| 仕上げ<br>中<br>Finishing-Medium | <br>シャープエッジ<br>Sharp Edge    | DCMT 11T304GP           | 9.525           | 3.97       | 4.4                      | 0.4                    | 7°           | ●      | ● |      |     |     |
|                              |   | 11T308GP                |                 |            |                          | 0.8                    |              |        |   |      |     |     |
| 仕上げ<br>中<br>Finishing-Medium | <br>シャープエッジ<br>Sharp Edge    | DCGT 070201MFP-GQ       | 6.35            | 2.38       | 2.8                      | <0.1                   | 7°           | ●      | ● |      |     |     |
|                              |   | 070202MFP-GQ            |                 |            |                          | <0.2                   |              |        |   |      |     |     |
|                              |   | 070204MFP-GQ            |                 |            |                          | <0.4                   |              |        |   |      |     |     |
|                              |   | DCGT 11T301MFP-GQ       |                 |            |                          | <0.1                   |              |        |   |      |     |     |
| 仕上げ<br>中<br>Finishing-Medium | <br>シャープエッジ<br>Sharp Edge  | DCMT 11T302MFP-GQ       | 9.525           | 3.97       | 4.4                      | <0.2                   | 7°           | ●      | ● |      |     |     |
|                              |   | 11T304MFP-GQ            |                 |            |                          | <0.4                   |              |        |   |      |     |     |
|                              |   | 11T304MFP-GQ            |                 |            |                          | <0.4                   |              |        |   |      |     |     |
|                              |   | DCMT 070202GK           |                 |            |                          | 6.35                   |              |        |   | 2.38 | 2.8 | 0.2 |
| 070204GK                     | 0.4   |                         |                 |            |                          |                        |              |        |   |      |     |     |
| 070208GK                     | 0.8   |                         |                 |            |                          |                        |              |        |   |      |     |     |
| DCMT 11T302GK                | 9.525   | 3.97                    | 4.4             | 0.2        |                          |                        |              |        |   |      |     |     |
| 11T304GK                     |   |                         |                 | 0.4        |                          |                        |              |        |   |      |     |     |
| 11T308GK                     |   |                         |                 | 0.8        |                          |                        |              |        |   |      |     |     |
| DCMT 11T302HQ                |   |                         |                 | 6.35       | 2.38                     | 2.8                    | 0.2          |        |   |      |     |     |
| 070204HQ                     | 0.4   |                         |                 |            |                          |                        |              |        |   |      |     |     |
| 070208HQ                     | 0.8   |                         |                 |            |                          |                        |              |        |   |      |     |     |
| DCMT 11T302HQ                | 9.525   | 3.97                    | 4.4             |            |                          |                        | 0.2          |        |   |      |     |     |
| 11T304HQ                     |   |                         |                 | 0.4        |                          |                        |              |        |   |      |     |     |
| 11T308HQ                     |   |                         |                 | 0.8        |                          |                        |              |        |   |      |     |     |
| DCMT 11T308HQ                |   |                         |                 | 0.8        |                          |                        |              |        |   |      |     |     |
| 中切削<br>Medium cutting        | <br>シャープエッジ<br>Sharp Edge  | DCGT 0702005MF          | 6.35            | 2.38       | 2.8                      | <0.05                  | 7°           | ●      | ● |      |     |     |
|                              |   | 070201MF                |                 |            |                          | <0.1                   |              |        |   |      |     |     |
|                              |   | 070202MF                |                 |            |                          | <0.2                   |              |        |   |      |     |     |
|                              |   | 070204MF                |                 |            |                          | <0.4                   |              |        |   |      |     |     |
| 軟鋼<br>Soft Steel             | <br>シャープエッジ<br>Sharp Edge  | DCGT 11T3005MF          | 9.525           | 3.97       | 4.4                      | <0.05                  | 7°           | ●      | ● |      |     |     |
|                              |   | 11T301MF                |                 |            |                          | <0.1                   |              |        |   |      |     |     |
|                              |   | 11T302MF                |                 |            |                          | <0.2                   |              |        |   |      |     |     |
|                              |   | 11T304MF                |                 |            |                          | <0.4                   |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCMT 070204XP           | 6.35            | 2.38       | 2.8                      | 0.4                    | 7°           | ●      | ● |      |     |     |
|                              |   | DCMT 11T302XP           |                 |            |                          | 9.525                  |              |        |   | 3.97 | 4.4 | 0.2 |
|                              |   | 11T304XP                |                 |            |                          |                        |              |        |   |      |     | 0.4 |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCET 0702005M%-FSF      | 6.35            | 2.38       | 2.8                      | <0.05                  | 7°           | ●      | ● |      |     |     |
|                              |   | 070201M%-FSF            |                 |            |                          | <0.1                   |              |        |   |      |     |     |
|                              |   | 070202M%-FSF            |                 |            |                          | <0.2                   |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCET 070204M%-FSF       | 9.525           | 3.97       | 4.4                      | <0.4                   | 7°           | ●      | ● |      |     |     |
|                              |   | DCET 11T3005M%-FSF      |                 |            |                          | <0.05                  |              |        |   |      |     |     |
|                              |   | 11T301M%-FSF            |                 |            |                          | <0.1                   |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCET 11T302M%-FSF       | 9.525           | 3.97       | 4.4                      | <0.2                   | 7°           | ●      | ● |      |     |     |
|                              |   | 11T304M%-FSF            |                 |            |                          | <0.4                   |              |        |   |      |     |     |
|                              |   | 11T304M%-FSF            |                 |            |                          | <0.4                   |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCET 0702005M%-F        | 6.35            | 2.38       | 2.8                      | <0.05                  | 7°           | R      | ● |      |     |     |
|                              |   | 070201M%-F              |                 |            |                          | <0.1                   |              |        |   |      |     |     |
|                              |   | 070202M%-F              |                 |            |                          | <0.2                   |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCET 070204M%-F         | 9.525           | 3.97       | 4.4                      | <0.4                   | 7°           | R      | ● |      |     |     |
|                              |   | DCET 11T3005M%-F        |                 |            |                          | <0.05                  |              |        |   |      |     |     |
|                              |   | 11T301M%-F              |                 |            |                          | <0.1                   |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCET 11T302M%-F         | 9.525           | 3.97       | 4.4                      | <0.2                   | 7°           | ●      | ● |      |     |     |
|                              |   | 11T304M%-F              |                 |            |                          | <0.4                   |              |        |   |      |     |     |
|                              |   | 11T304M%-F              |                 |            |                          | <0.4                   |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCGT 0702005M%-F        | 6.35            | 2.38       | 2.8                      | <0.05                  | 7°           | ●      | ● |      |     |     |
|                              |   | 070201M%-F              |                 |            |                          | <0.1                   |              |        |   |      |     |     |
|                              |   | 070202M%-F              |                 |            |                          | <0.2                   |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCGT 070204M%-F         | 9.525           | 3.97       | 4.4                      | <0.4                   | 7°           | ●      | ● |      |     |     |
|                              |   | DCGT 11T3005M%-F        |                 |            |                          | <0.05                  |              |        |   |      |     |     |
|                              |   | 11T301M%-F              |                 |            |                          | <0.1                   |              |        |   |      |     |     |
| 仕上げ<br>Finishing             | <br>スーパーファイン<br>Super Fine | DCGT 11T302M%-F         | 9.525           | 3.97       | 4.4                      | <0.2                   | 7°           | ●      | ● |      |     |     |
|                              |   | 11T304M%-F              |                 |            |                          | <0.4                   |              |        |   |      |     |     |
|                              |   | 11T304M%-F              |                 |            |                          | <0.4                   |              |        |   |      |     |     |













・コーナーR(re)が不等号(例:<0.05,<0.1,<0.2等)で表示されています。チップは、コーナーR(re)がマイナス公差の製品を示します。  
An insert which corner R(re) dimension is shown with inequality sign (Ex:<0.05,<0.1,<0.2) indicates minus tolerance of corner R(re).













●: 標準在庫 ●: Standard Stock

R: 右勝手 (R) のみ在庫 R: R-hand Only

# 標準在庫型番(ポジ)

Stock Items(Positive)

| 形状<br>Shape   | 型番<br>Description   | 寸法(mm)<br>Dimension(mm) |                 |            |                                |                        | 材種<br>Grades |        |
|---|---------------------|-------------------------|-----------------|------------|--------------------------------|------------------------|--------------|--------|
|   |                     | 内接<br>円径<br>I.C.        | 厚み<br>Thickness | 穴径<br>Hole | コーナー<br>半径<br>Corner-<br>R(re) | 逃げ角<br>Relief<br>Angle | PR1425       | PR1225 |
| 低送り<br>Low Feed<br>      | DCET 0702005MF%-USF | 6.35                    | 2.38            | 2.8        | <0.05                          | 7°                     | ●            | ●      |
|   | 070201MF%-USF       |                         |                 |            | <0.1                           |                        | ●            | ●      |
|   | 070202MF%-USF       |                         |                 |            | <0.2                           |                        | ●            | ●      |
|   | DCET 11T3005MF%-USF | 9.525                   | 3.97            | 4.4        | <0.05                          |                        | ●            | ●      |
|   | 11T301MF%-USF       |                         |                 |            | <0.1                           |                        | ●            | ●      |
| 11T302MF%-USF   | <0.2                |                         |                 |            | ●                              | ●                      |              |        |
| 低送り<br>Low Feed<br>      | DCET 0702005MF%-U   | 6.35                    | 2.38            | 2.8        | <0.05                          | 7°                     | R            | ●      |
|   | 070201MF%-U         |                         |                 |            | <0.1                           |                        | ●            | ●      |
|   | 070202MF%-U         |                         |                 |            | <0.2                           |                        | ●            | ●      |
|   | DCET 11T3005MF%-U   | 9.525                   | 3.97            | 4.4        | <0.05                          |                        | R            | ●      |
|   | 11T301MF%-U         |                         |                 |            | <0.1                           |                        | ●            | ●      |
| 11T302MF%-U   | <0.2                |                         |                 |            | ●                              | ●                      |              |        |
| 低送り<br>Low Feed<br>      | DCGT 0702005MF%-U   | 6.35                    | 2.38            | 2.8        | <0.05                          | 7°                     | ●            | ●      |
|   | 070201MF%-U         |                         |                 |            | <0.1                           |                        | ●            | ●      |
|   | 070202MF%-U         |                         |                 |            | <0.2                           |                        | ●            | ●      |
|   | DCGT 11T3005MF%-U   | 9.525                   | 3.97            | 4.4        | <0.05                          |                        | ●            | ●      |
|   | 11T301MF%-U         |                         |                 |            | <0.1                           |                        | ●            | ●      |
| 11T302MF%-U   | <0.2                |                         |                 |            | ●                              | ●                      |              |        |
| 低送り<br>Low Feed<br>     | DCET 0702005MF%-J   | 6.35                    | 2.38            | 2.8        | <0.05                          | 7°                     | R            | R      |
|   | 070201MF%-J         |                         |                 |            | <0.1                           |                        | ●            | ●      |
|   | 070202MF%-J         |                         |                 |            | <0.2                           |                        | ●            | ●      |
| 低送り<br>Low Feed<br>    | DCET 11T3005MF%-JSF | 9.525                   | 3.97            | 4.4        | <0.05                          | 7°                     | ●            | ●      |
|   | 11T301MF%-JSF       |                         |                 |            | <0.1                           |                        | ●            | ●      |
|   | 11T302MF%-JSF       |                         |                 |            | <0.2                           |                        | ●            | ●      |
| 低送り<br>Low Feed<br>    | DCET 11T3005MF%-J   | 9.525                   | 3.97            | 4.4        | <0.05                          | 7°                     | R            | ●      |
|   | 11T301MF%-J         |                         |                 |            | <0.1                           |                        | ●            | ●      |
|   | 11T302MF%-J         |                         |                 |            | <0.2                           |                        | ●            | ●      |
| 低送り<br>Low Feed<br>    | DCGT 11T3005MF%-J   | 9.525                   | 3.97            | 4.4        | <0.05                          | 7°                     | ●            | ●      |
|   | 11T301MF%-J         |                         |                 |            | <0.1                           |                        | ●            | ●      |
|   | 11T302MF%-J         |                         |                 |            | <0.2                           |                        | ●            | ●      |
| 仕上げ<br>Finishing<br>   | JCET 030102M%-F     | 3.5                     | 1.4             | 1.9        | <0.2                           | 7°                     | ●            | ●      |
|   | 030104M%-F          |                         |                 |            | <0.4                           |                        | ●            | ●      |
| 微小切込み<br>Minute ap<br> | TBGT 060101MP-CF    | 3.97                    | 1.59            | 2.3        | <0.1                           | 5°                     | ●            | ●      |
|   | 060102MP-CF         |                         |                 |            | <0.2                           |                        | ●            | ●      |
| 仕上げ<br>Finishing<br>   | TBET 0601005M%      | 3.97                    | 1.59            | 2.3        | <0.05                          | 5°                     | ●            | ●      |
|   | 060101M%            |                         |                 |            | <0.1                           |                        | ●            | ●      |
|   | 060102M%            |                         |                 |            | <0.2                           |                        | ●            | ●      |
|   | 060104M%            |                         |                 |            | <0.4                           |                        | ●            | ●      |
| 低送り<br>Low Feed<br>    | TCGT 0802005MF%-U   | 4.76                    | 2.38            | 2.3        | <0.05                          | 7°                     | ●            | ●      |
|   | 080201MF%-U         |                         |                 |            | <0.1                           |                        | ●            | ●      |
|   | 080202MF%-U         |                         |                 |            | <0.2                           |                        | ●            | ●      |
|   | TCGT 1103005MF%-U   | 6.35                    | 3.18            | 2.8        | <0.05                          |                        | ●            | ●      |
|   | 110301MF%-U         |                         |                 |            | <0.1                           |                        | ●            | ●      |
| 110302MF%-U   | <0.2                |                         |                 |            | ●                              | ●                      |              |        |
| 微小切込み<br>Minute ap<br> | TPGT 080201MP-CF    | 4.76                    | 2.38            | 2.3        | <0.1                           | 11°                    | ●            | ●      |
|   | 080202MP-CF         |                         |                 |            | <0.2                           |                        | ●            | ●      |
|   | TPGT 090201MP-CF    | 5.56                    | 2.38            | 3.0        | <0.1                           |                        | ●            | ●      |
| 090202MP-CF   | <0.2                |                         |                 |            | ●                              | ●                      |              |        |

| 形状<br>Shape  | 型番<br>Description  | 寸法(mm)<br>Dimension(mm) |                 |            |                                |                        | 材種<br>Grades |        |
|--|--------------------|-------------------------|-----------------|------------|--------------------------------|------------------------|--------------|--------|
|  |                    | 内接<br>円径<br>I.C.        | 厚み<br>Thickness | 穴径<br>Hole | コーナー<br>半径<br>Corner-<br>R(re) | 逃げ角<br>Relief<br>Angle | PR1425       | PR1225 |
| 仕上げ<br>Finishing<br>          | TPGH 080201%       | 4.76                    | 2.38            | 2.3        | 0.1                            | 11°                    | ●            | ●      |
|  | 080202%            |                         |                 |            | 0.2                            |                        | ●            | ●      |
|  | 080204%            |                         |                 |            | 0.4                            |                        | ●            | ●      |
|  | TPGH 090201%       | 5.56                    | 2.38            | 3          | 0.1                            |                        | ●            | ●      |
|  | 090202%            |                         |                 |            | 0.2                            |                        | ●            | ●      |
|  | 090204%            |                         |                 |            | 0.4                            |                        | ●            | ●      |
| 仕上げ<br>Finishing<br>          | TPGH 110202%       | 6.35                    | 2.38            | 3.5        | 0.2                            | 11°                    | ●            | ●      |
|  | 110204%            |                         |                 |            | 0.4                            |                        | ●            | ●      |
|  | TPGH 110302%       | 6.35                    | 3.18            | 3.3        | 0.2                            |                        | ●            | ●      |
|  | 110304%            |                         |                 |            | 0.4                            |                        | ●            | ●      |
|  | TPGH 110308%       | 9.525                   | 3.18            | 4.5        | 0.8                            |                        | ●            | ●      |
|  | 160302%            |                         |                 |            | 0.2                            |                        | ●            | ●      |
| 中切削<br>Medium Cutting<br>     | TPGH 160304%       | 9.525                   | 3.18            | 4.5        | 0.4                            | 11°                    | ●            | ●      |
|  | 160308%            |                         |                 |            | 0.8                            |                        | ●            | ●      |
|  | TPGH 110302%-H     | 6.35                    | 3.18            | 3.3        | 0.2                            |                        | ●            | ●      |
|  | 110304%-H          |                         |                 |            | 0.4                            |                        | ●            | ●      |
|  | TPGH 110308%-H     | 9.525                   | 3.18            | 4.5        | 0.8                            |                        | ●            | ●      |
|  | 160304%-H          |                         |                 |            | 0.4                            |                        | ●            | ●      |
| 仕上げ<br>Finishing<br>        | TPMT 090202GP      | 5.56                    | 2.38            | 2.8        | 0.2                            | 11°                    | ●            | ●      |
|  | 090204GP           |                         |                 |            | 0.4                            |                        | ●            | ●      |
|  | TPMT 110304GP      | 6.35                    | 3.18            | 3.3        | 0.4                            |                        | ●            | ●      |
|  | 110308GP           |                         |                 |            | 0.8                            |                        | ●            | ●      |
|  | TPMT 160304GP      | 9.525                   | 3.18            | 4.5        | 0.4                            |                        | ●            | ●      |
|  | 160308GP           |                         |                 |            | 0.8                            |                        | ●            | ●      |
| 仕上げ<br>Finishing-Medium<br> | TPMT 090202HQ      | 5.56                    | 2.38            | 2.8        | 0.2                            | 11°                    | ●            | ●      |
|  | 090204HQ           |                         |                 |            | 0.4                            |                        | ●            | ●      |
|  | TPMT 110302HQ      | 6.35                    | 3.18            | 3.3        | 0.2                            |                        | ●            | ●      |
|  | 110304HQ           |                         |                 |            | 0.4                            |                        | ●            | ●      |
|  | TPMT 110308HQ      | 9.525                   | 3.18            | 4.5        | 0.8                            |                        | ●            | ●      |
|  | 160302HQ           |                         |                 |            | 0.2                            |                        | ●            | ●      |
| 軟鋼<br>Low Carbon Steel<br>  | TPMT 160304HQ      | 9.525                   | 3.18            | 4.5        | 0.4                            | 11°                    | ●            | ●      |
|  | 160308HQ           |                         |                 |            | 0.8                            |                        | ●            | ●      |
|  | TPMT 090204XP      | 5.56                    | 2.38            | 2.8        | 0.4                            |                        | ●            | ●      |
|  | 110304XP           |                         |                 |            | 0.8                            |                        | ●            | ●      |
|  | TPMT 110308XP      | 6.35                    | 3.18            | 3.3        | 0.4                            |                        | ●            | ●      |
|  | 160304XP           |                         |                 |            | 0.8                            |                        | ●            | ●      |
| TPMT 160308XP  | 9.525              | 2.18                    | 4.5             | 0.4        | ●                              | ●                      |              |        |
| 160308XP   |                    |                         |                 | 0.8        | ●                              | ●                      |              |        |
| 仕上げ<br>Finishing<br>        | VBMT 110304GP      | 6.35                    | 3.18            | 2.8        | 0.4                            | 5°                     | ●            | ●      |
|  | VBMT 110302VF      | 6.35                    | 3.18            | 2.8        | 0.2                            | 5°                     | ●            | ●      |
|  | 110304VF           |                         |                 |            | 0.4                            |                        | ●            | ●      |
| 110308VF   | 0.8                |                         |                 |            | ●                              |                        | ●            |        |
| 仕上げ<br>Finishing-Medium<br> | VBMT 110304HQ      | 6.35                    | 3.18            | 2.8        | 0.4                            | 5°                     | ●            | ●      |
|  | 110308HQ           |                         |                 |            | 0.8                            |                        | ●            | ●      |
| 仕上げ<br>Finishing<br>        | VBET 1103005M%-FSF | 6.35                    | 3.18            | 2.8        | <0.05                          | 5°                     | ●            | ●      |
|  | 110301M%-FSF       |                         |                 |            | <0.1                           |                        | ●            | ●      |
|  | 110302M%-FSF       |                         |                 |            | <0.2                           |                        | ●            | ●      |
| 仕上げ<br>Finishing<br>        | VBET 1103005M%-F   | 6.35                    | 3.18            | 2.8        | <0.05                          | 5°                     | ●            | ●      |
|  | 110301M%-F         |                         |                 |            | <0.1                           |                        | ●            | ●      |
|  | 110302M%-F         |                         |                 |            | <0.2                           |                        | ●            | ●      |
| 仕上げ<br>Finishing<br>        | VBGT 1103005M%-F   | 6.35                    | 3.18            | 2.8        | <0.05                          | 5°                     | ●            | ●      |
|  | 110301M%-F         |                         |                 |            | <0.1                           |                        | ●            | ●      |
|  | 110302M%-F         |                         |                 |            | <0.2                           |                        | ●            | ●      |
| 仕上げ<br>Finishing-Medium<br> | VBET 1103005M%-Y   | 6.35                    | 3.18            | 2.8        | <0.05                          | 5°                     | ●            | ●      |
|  | 110301M%-Y         |                         |                 |            | <0.1                           |                        | ●            | ●      |
|  | 110302M%-Y         |                         |                 |            | <0.2                           |                        | ●            | ●      |
|  | 110304M%-Y         |                         |                 |            | <0.4                           |                        | ●            | ●      |



| 形状<br>Shape                      | 型番<br>Description  | 寸法(mm)<br>Dimension(mm) |                 |            |                          |                     | 材種<br>Grades |        |
|----------------------------------|--------------------|-------------------------|-----------------|------------|--------------------------|---------------------|--------------|--------|
|                                  |                    | 内接円径<br>I.C.            | 厚み<br>Thickness | 穴径<br>Hole | コーナR(re)<br>Corner-R(re) | 逃げ角<br>Relief Angle | PR1425       | PR1225 |
| 仕上げ<br>中<br>Finishing-Medium<br> | VBGT 1103005M%-Y   |                         |                 |            | <0.05                    |                     | ●            |        |
|                                  | 110301M%-Y         |                         |                 |            | <0.1                     |                     | ●            |        |
|                                  | 110302M%-Y         | 6.35                    | 3.18            | 2.8        | <0.2                     |                     | ●            |        |
|                                  | 110304M%-Y         |                         |                 |            | <0.4                     | 5°                  | ●            |        |
|                                  | 110308M%-Y         |                         |                 |            | <0.8                     |                     | ●            |        |
| 仕上げ<br>Sharp Edge                | VBGT 160402M%-Y    |                         |                 |            | <0.2                     |                     | ●            |        |
|                                  | 160404M%-Y         | 9.525                   | 4.76            | 4.4        | <0.4                     |                     | ●            |        |
|                                  | 160408M%-Y         |                         |                 |            | <0.8                     |                     | ●            |        |
| 仕上げ<br>Finishing                 | VCMT 080202VF      | 4.76                    | 2.38            | 2.3        | 0.2                      | 7°                  | ●            |        |
|                                  | 080204VF           |                         |                 |            | 0.4                      |                     | ●            |        |
| 仕上げ<br>中<br>Finishing-Medium     | VCMT 080202HQ      | 4.76                    | 2.38            | 2.3        | 0.2                      | 7°                  | ●            |        |
|                                  | 080204HQ           |                         |                 |            | 0.4                      |                     | ●            |        |
| 微小切込み<br>Minute ap               | VPGT 110301MP-CF   | 6.35                    | 3.18            | 2.8        | <0.1                     | 11°                 | ●            | ●      |
|                                  | 110302MP-CF        |                         |                 |            | <0.2                     |                     | ●            | ●      |
| 仕上げ<br>Finishing                 | VPGT 110301MFP-GF  | 6.35                    | 3.18            | 2.8        | <0.1                     | 11°                 | ●            | ●      |
|                                  | 110302MFP-GF       |                         |                 |            | <0.2                     |                     | ●            | ●      |
| 仕上げ<br>Finishing                 | VPGT 080201MP-CK   | 4.76                    | 2.38            | 2.3        | <0.1                     |                     | ●            | ●      |
|                                  | 080202MP-CK        |                         |                 |            | <0.2                     | 11°                 | ●            | ●      |
|                                  | VPGT 110301MP-CK   | 6.35                    | 3.18            | 2.8        | <0.1                     |                     | ●            | ●      |
| 仕上げ<br>Super Fine                | VPET 080201M%-FSF  | 4.76                    | 2.38            | 2.3        | <0.1                     |                     | ●            | ●      |
|                                  | 080202M%-FSF       |                         |                 |            | <0.2                     |                     | ●            | ●      |
|                                  | VPET 1103005M%-FSF |                         |                 |            | <0.05                    | 11°                 | ●            | ●      |
| 仕上げ<br>Sharp Edge / Precision    | 110301M%-FSF       | 6.35                    | 3.18            | 2.8        | <0.1                     |                     | ●            | ●      |
|                                  | 110302M%-FSF       |                         |                 |            | <0.2                     |                     | ●            | ●      |

| 形状<br>Shape        | 型番<br>Description   | 寸法(mm)<br>Dimension(mm) |                 |            |                          |                     | 材種<br>Grades |        |
|--------------------|---------------------|-------------------------|-----------------|------------|--------------------------|---------------------|--------------|--------|
|                    |                     | 内接円径<br>I.C.            | 厚み<br>Thickness | 穴径<br>Hole | コーナR(re)<br>Corner-R(re) | 逃げ角<br>Relief Angle | PR1425       | PR1225 |
| 仕上げ<br>Finishing   | VPET 080201M%-F     | 4.76                    | 2.38            | 2.3        | <0.1                     |                     | ●            |        |
|                    | 080202M%-F          |                         |                 |            | <0.2                     |                     | ●            |        |
|                    | VPET 1103005M%-F    | 6.35                    | 3.18            | 2.8        | <0.05                    | 11°                 | R            |        |
|                    | 110301M%-F          |                         |                 |            | <0.1                     |                     | R            |        |
| 低送り<br>Low Feed    | VPET 080201MF%-USF  | 4.76                    | 2.38            | 2.3        | <0.1                     |                     | ●            | ●      |
|                    | 080202MF%-USF       |                         |                 |            | <0.2                     |                     | ●            | ●      |
|                    | VPET 1103005MF%-USF | 6.35                    | 3.18            | 2.8        | <0.05                    | 11°                 | R            | ●      |
|                    | 110301MF%-USF       |                         |                 |            | <0.1                     |                     | R            | ●      |
| 低送り<br>Low Feed    | VPET 080201MF%-U    | 4.76                    | 2.38            | 2.3        | <0.1                     |                     | ●            | ●      |
|                    | 080202MF%-U         |                         |                 |            | <0.2                     |                     | ●            | ●      |
|                    | VPET 1103005MF%-U   | 6.35                    | 3.18            | 2.8        | <0.05                    | 11°                 | R            | ●      |
| 低送り<br>Low Feed    | VPET 110301MF%-U    |                         |                 |            | <0.1                     |                     | R            | ●      |
|                    | 110302MF%-U         |                         |                 |            | <0.2                     |                     | R            | ●      |
| 微小切込み<br>Minute ap | WBGT 060101MP%-CF   | 3.97                    | 1.59            | 2.3        | <0.1                     | 5°                  | ●            | ●      |
|                    | 060102MP%-CF        |                         |                 |            | <0.2                     |                     | ●            | ●      |
| 仕上げ<br>Finishing   | WBMT 060102%-DP     | 3.97                    | 1.59            | 2.3        | 0.2                      |                     | ●            | ●      |
|                    | 060104%-DP          |                         |                 |            | 0.4                      | 5°                  | ●            | ●      |
|                    | WBMT 080202%-DP     | 4.76                    | 2.38            | 2.3        | 0.2                      |                     | ●            | ●      |
| 仕上げ<br>Finishing   | WBET 0601005M%-F    | 3.97                    | 1.59            | 2.3        | <0.05                    |                     | L            |        |
|                    | 060101M%-F          |                         |                 |            | <0.1                     |                     | L            |        |
|                    | 060102M%-F          |                         |                 |            | <0.2                     |                     | L            |        |
|                    | 060104M%-F          |                         |                 |            | <0.4                     | 5°                  | L            |        |
|                    | WBET 080201M%-F     | 4.76                    | 2.38            | 2.3        | <0.1                     |                     | L            |        |
|                    | 080202M%-F          |                         |                 |            | <0.2                     |                     | L            |        |
| 仕上げ<br>Sharp Edge  | 080204M%-F          |                         |                 |            | <0.4                     |                     | ●            |        |

・コーナR(re)が不等号(例:<0.05,<0.1,<0.2等)で表示されていますチップは、コーナR(re)がマイナス公差の製品を示します。  
An insert which corner R(re) dimension is shown with inequality sign (Ex:<0.05,<0.1,<0.2) indicates minus tolerance of corner R(re).

●:標準在庫 ●:Standard Stock

R:右勝手(R)のみ在庫 R: R-hand Only L:左勝手(L)のみ在庫 L: L-hand Only

## あとびき用(AABS/SABS/AABW/SABW型ホルダ用) Inserts for back turning toolholders (AABS/SABS/AABW/SABW)

| 形状<br>Shape | 型番<br>Description        | 寸法 (mm)<br>Dimension(mm) | MEGACOAT<br>NANO | MEGACOAT |
|-------------|--------------------------|--------------------------|------------------|----------|
|             |                          | rε                       | PR1425           | PR1225   |
|             | ABS 15R4005M<br>15R4015M | <0.05<br><0.15           | ●<br>●           | ●<br>●   |
|             | ABW 15R4005M<br>15R4015M | <0.05<br><0.15           | ●<br>●           | ●<br>●   |
|             | ABW 23R5005M<br>23R5015M | <0.05<br><0.15           | ●<br>●           | ●<br>●   |

・コーナR(re)寸法が不等号(例:<0.05,<0.1,<0.2等)で表示されていますチップは、コーナR(re)がマイナス公差の製品を示します。

・取り付けホルダは総合カタログをご確認ください。

・Inserts with corner R(re) dimension expressed in less than sign (e.g.<0.05,<0.1,<0.2, etc.) indicate models with minus tolerance for corner R(re).

・For applicable toolholders, refer to the General Catalog.

## 標準在庫型番 Stock Items

| 形状<br>Shape                   | 型番<br>Description | 寸法 (mm)<br>Dimension (mm) |                 |            |                             | 材種<br>Grades |        |
|-------------------------------|-------------------|---------------------------|-----------------|------------|-----------------------------|--------------|--------|
|                               |                   | 内接<br>円径<br>I.C.          | 厚み<br>Thickness | 穴径<br>Hole | コーナー(R)<br>Corner-<br>R(re) | PR1425       | PR1225 |
| 仕上げ〜中<br>Finishing-Medium<br> | CNGU 070301MFP-SK | 7.5                       | 3.18            | 3.6        | <0.1                        | ●            | ●      |
|                               | 070302MFP-SK      |                           |                 |            | <0.2                        | ●            | ●      |
| 中〜荒<br>Medium-Roughing<br>    | CNMU 070302E-GK   | 7.5                       | 3.18            | 3.6        | 0.2                         | ●            | ●      |
|                               | 070304E-GK        |                           |                 |            | 0.4                         | ●            | ●      |
| 仕上げ<br>Finishing<br>          | CNGU 0703005MFR-F | 7.5                       | 3.18            | 3.6        | <0.05                       | ●            | ●      |
|                               | 070301MFR-F       |                           |                 |            | <0.1                        | ●            | ●      |
|                               | 070302MFR-F       |                           |                 |            | <0.2                        | ●            | ●      |
| 低送り<br>Low Feed<br>           | 070304MFR-F       | <0.4                      | ●               | ●          |                             |              |        |
|                               | CNGU 0703005MFR-U | 7.5                       | 3.18            | 3.6        | <0.05                       | ●            | ●      |
|                               | 070301MFR-U       |                           |                 |            | <0.1                        | ●            | ●      |
| 070302MFR-U                   | <0.2              |                           |                 |            | ●                           | ●            |        |
| 仕上げ〜中<br>Finishing-Medium<br> | 070304MFR-U       | <0.4                      | ●               | ●          |                             |              |        |
|                               | DNGU 080301MFP-SK | 7.0                       | 3.18            | 3.6        | <0.1                        | ●            | ●      |
|                               | 080302MFP-SK      |                           |                 |            | <0.2                        | ●            | ●      |
| 080304MFP-SK                  | <0.4              |                           |                 |            | ●                           | ●            |        |
| 中〜荒<br>Medium-Roughing<br>    | DNMU 080302E-GK   | 7.0                       | 3.18            | 3.6        | 0.2                         | ●            | ●      |
|                               | 080304E-GK        |                           |                 |            | 0.4                         | ●            | ●      |
| 仕上げ<br>Finishing<br>          | DNGU 0803005MFR-F | 7.0                       | 3.18            | 3.6        | <0.05                       | ●            | ●      |
|                               | 080301MFR-F       |                           |                 |            | <0.1                        | ●            | ●      |
|                               | 080302MFR-F       |                           |                 |            | <0.2                        | ●            | ●      |
| 低送り<br>Low Feed<br>           | 080304MFR-F       | <0.4                      | ●               | ●          |                             |              |        |

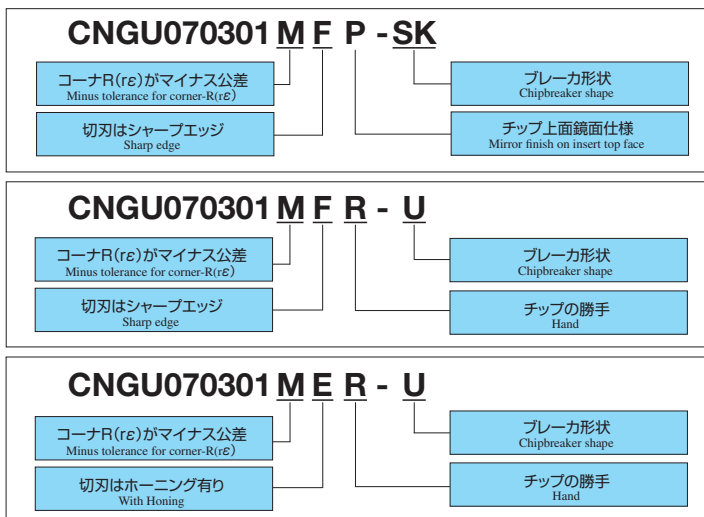
| 形状<br>Shape          | 型番<br>Description | 寸法 (mm)<br>Dimension (mm) |                 |            |                             | 材種<br>Grades |        |
|----------------------|-------------------|---------------------------|-----------------|------------|-----------------------------|--------------|--------|
|                      |                   | 内接<br>円径<br>I.C.          | 厚み<br>Thickness | 穴径<br>Hole | コーナー(R)<br>Corner-<br>R(re) | PR1425       | PR1225 |
| 低送り<br>Low Feed<br>  | DNGU 0803005MFR-U | 7.0                       | 3.18            | 3.6        | <0.05                       | ●            | ●      |
|                      | 080301MFR-U       |                           |                 |            | <0.1                        | ●            | ●      |
|                      | 080302MFR-U       |                           |                 |            | <0.2                        | ●            | ●      |
|                      | 080304MFR-U       |                           |                 |            | <0.4                        | ●            | ●      |
| 仕上げ<br>Finishing<br> | TNGU 0903005MFR-F | 5.56                      | 3.18            | 3.0        | <0.05                       | ●            | ●      |
|                      | 090301MFR-F       |                           |                 |            | <0.1                        | ●            | ●      |
|                      | 090302MFR-F       |                           |                 |            | <0.2                        | ●            | ●      |
| 低送り<br>Low Feed<br>  | 090304MFR-F       | <0.4                      | ●               | ●          |                             |              |        |
|                      | TNGU 0903005MFR-U | 5.56                      | 3.18            | 3.0        | <0.05                       | ●            | ●      |
|                      | 090301MFR-U       |                           |                 |            | <0.1                        | ●            | ●      |
| 090302MFR-U          | <0.2              |                           |                 |            | ●                           | ●            |        |
| 低送り<br>Low Feed<br>  | 090304MFR-U       | <0.4                      | ●               | ●          |                             |              |        |

・コーナー(R)が不等号(例:<0.05,<0.1,<0.2等)で表示されていますチップは、コーナーR(re)がマイナス公差の製品を示します。  
An insert which corner R(re) dimension is shown with inequality sign (Ex:<0.05,<0.1,<0.2) indicates minus tolerance of corner R(re).

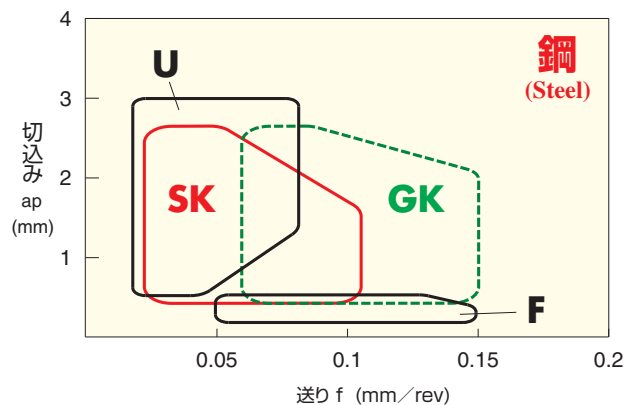
●:標準在庫 ●:Standard Stock

| 切削領域<br>Cutting Range     | 名称<br>Name | ブレイカ断面<br>Design | 特長<br>Advantages  |
|---------------------------|------------|------------------|---|
| 仕上げ〜中<br>Finishing-Medium | SK         |                  | 鋼・ステンレス鋼加工時の切りくず処理と低抵抗切削を両立。ポジチップに匹敵する切れ味を実現。<br>Superior chip evacuation and low cutting force for machining steel and stainless steel. Cutting performance comparable to positive insert. |
| 中〜荒<br>Medium-Roughing    | GK         |                  | 先端でブレイカドットと広い切りくずポケットにより、広範囲で切りくず処理良好。<br>Good chip evacuation at wide range through chipbreaker dot and wide chip pocket.  |
| 仕上げ<br>Finishing          | F          |                  | 切りくずの流れをコントロールし、低抵抗切削が可能。<br>Good chip control for finishing to light cutting with low cutting force.   |
| 低送り<br>Low Feed           | U          |                  | 低送りで切込み量に変化しても切りくずを確実にコントロールし、低抵抗切削が可能。<br>Good chip control at low feed rate and varied ap with low cutting force.   |

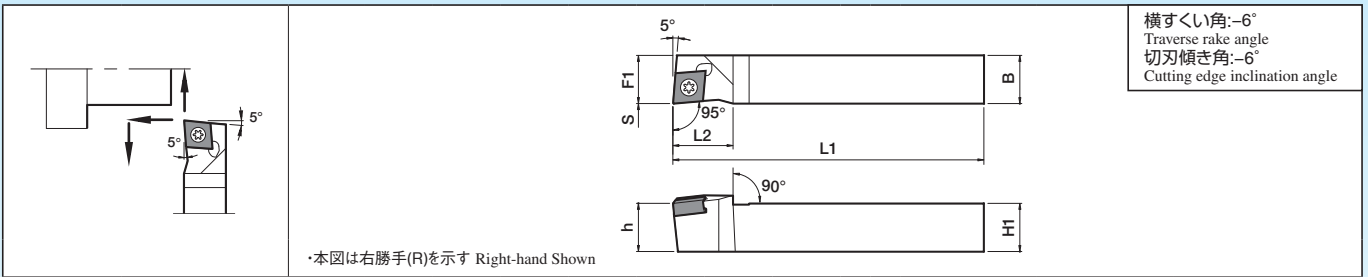
## 自動盤用スモールネガチップの表示例 Small Double-Sided Tooling Identification System



## ブレイカマップ Chipbreaker Application Map



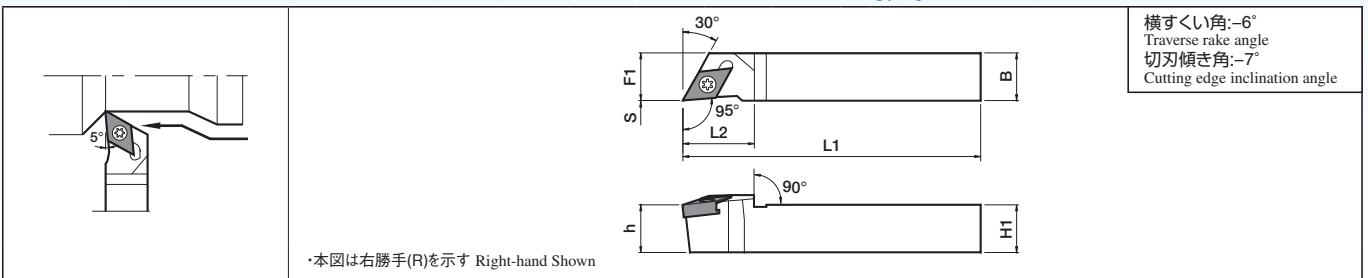
## ■SCLN-FF型(オフセットなし Without Offset) (外径・端面加工 External/Facing)



### ●ホルダ寸法 Toolholder Dimension

| 型番<br>Description | 在庫<br>Stock | 寸法(mm)<br>Dimension |    |     |    |    |   | 基準<br>コーナ<br>R<br>(re) | 部品<br>Spare Parts         |               | 適合チップ<br>Applicable Insert |
|-------------------|-------------|---------------------|----|-----|----|----|---|------------------------|---------------------------|---------------|----------------------------|
|                   |             | H1=h                | B  | L1  | L2 | F1 | S |                        | クランプ スクリュー<br>Clamp Screw | レンチ<br>Wrench |                            |
| SCLNR 1010K-07FF  | ●           | 10                  | 10 | 120 | 15 | 10 | 0 | 0.2                    | SB-3080TR                 | LTW-10SS      | CNGU0703..<br>CNMU0703..   |
| 1212F-07FF        | ●           | 12                  | 12 | 85  |    | 12 |   |                        |                           |               |                            |
| 1212K-07FF        | ●           | 16                  | 16 | 120 |    | 16 |   |                        |                           |               |                            |
| 1616K-07FF        | ●           |                     |    |     |    |    |   |                        |                           |               |                            |

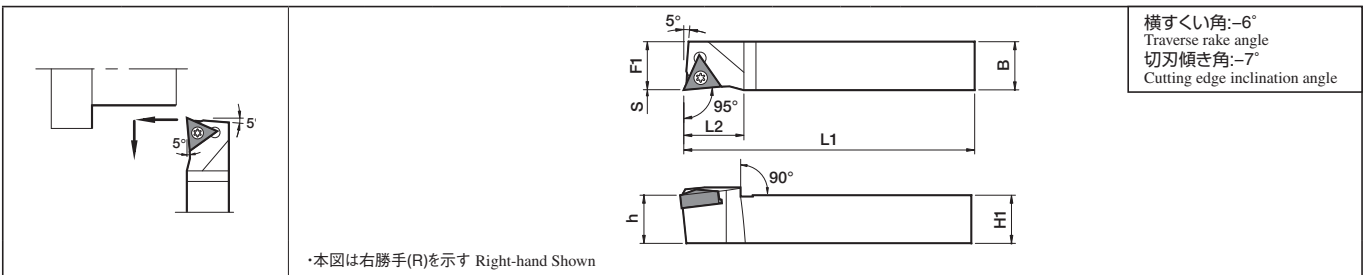
## ■SDLN-FF型(オフセットなし Without Offset) (外径・倣い加工 External/Copying)



### ●ホルダ寸法 Toolholder Dimension

| 型番<br>Description | 在庫<br>Stock | 寸法(mm)<br>Dimension |    |     |    |    |   | 基準<br>コーナ<br>R<br>(re) | 部品<br>Spare Parts         |               | 適合チップ<br>Applicable Insert |
|-------------------|-------------|---------------------|----|-----|----|----|---|------------------------|---------------------------|---------------|----------------------------|
|                   |             | H1=h                | B  | L1  | L2 | F1 | S |                        | クランプ スクリュー<br>Clamp Screw | レンチ<br>Wrench |                            |
| SDLNR 1010K-08FF  | ●           | 10                  | 10 | 120 | 18 | 10 | 0 | 0.2                    | SB-3080TR                 | LTW-10SS      | DNGU0803..<br>DNMU0803..   |
| 1212F-08FF        | ●           | 12                  | 12 | 85  |    | 12 |   |                        |                           |               |                            |
| 1212K-08FF        | ●           | 16                  | 16 | 120 |    | 16 |   |                        |                           |               |                            |
| 1616K-08FF        | ●           |                     |    |     |    |    |   |                        |                           |               |                            |

## ■STLN-FF型(オフセットなし Without Offset) (外径加工 External)










### ●ホルダ寸法 Toolholder Dimension

| 型番<br>Description | 在庫<br>Stock | 寸法(mm)<br>Dimension |    |     |    |    |   | 基準<br>コーナ<br>R<br>(re) | 部品<br>Spare Parts         |               | 適合チップ<br>Applicable Insert |
|-------------------|-------------|---------------------|----|-----|----|----|---|------------------------|---------------------------|---------------|----------------------------|
|                   |             | H1=h                | B  | L1  | L2 | F1 | S |                        | クランプ スクリュー<br>Clamp Screw | レンチ<br>Wrench |                            |
| STLNR 1010K-09FF  | ●           | 10                  | 10 | 120 | 15 | 10 | 0 | 0.2                    | SB-2570TR                 | LTW-8SS       | TNGU0903..                 |
| 1212F-09FF        | ●           | 12                  | 12 | 85  |    | 12 |   |                        |                           |               |                            |
| 1212K-09FF        | ●           | 16                  | 16 | 120 |    | 16 |   |                        |                           |               |                            |
| 1616K-09FF        | ●           |                     |    |     |    |    |   |                        |                           |               |                            |

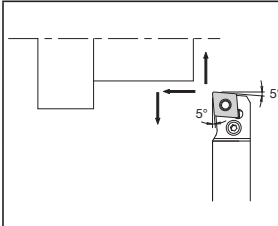
●:標準在庫 ●:Standard Stock

## 標準在庫型番 Stock Items

| 形状<br>Shape             | 型番<br>Description   | 寸法(mm)<br>Dimension(mm) |                 |            |                              | 材種<br>Grades |        |
|-------------------------|---|-------------------------|-----------------|------------|------------------------------|--------------|--------|
|                         |   | 内接円径<br>I.C.            | 厚み<br>Thickness | 穴径<br>Hole | コーナR<br>(rε)<br>Corner-R(rε) | PR1425       | PR1225 |
| 中粗〜粗<br>Medium-Roughing |  <b>CNGG 120404FP-TK</b> | 12.70                   | 4.76            | 5.16       | 0.4                          | ●            | ●      |
|                         | <b>120408FP-TK</b>  |                         |                 |            | 0.8                          | ●            | ●      |
|                         |  <b>DNGG 150404FP-TK</b> | 12.70                   | 4.76            | 5.16       | 0.4                          | ●            | ●      |
| <b>150408FP-TK</b>      | 0.8   |                         |                 |            | ●                            | ●            |        |
|                         |  <b>TNGG 160404FP-TK</b> | 9.525                   | 4.76            | 3.81       | 0.4                          | ●            | ●      |
|                         | <b>160408FP-TK</b>  |                         |                 |            | 0.8                          | ●            | ●      |

| 形状<br>Shape             | 型番<br>Description  | 寸法(mm)<br>Dimension(mm) |                 |            |                              | 材種<br>Grades |        |
|-------------------------|--|-------------------------|-----------------|------------|------------------------------|--------------|--------|
|                         |  | 内接円径<br>I.C.            | 厚み<br>Thickness | 穴径<br>Hole | コーナR<br>(rε)<br>Corner-R(rε) | PR1425       | PR1225 |
| 仕上げ<br>Finishing-Medium |  <b>CNGG 120402MFP-SK</b> | 12.70                   | 4.76            | 5.16       | <0.2                         | ●            | ●      |
|                         | <b>120404MFP-SK</b>  |                         |                 |            | <0.4                         | ●            | ●      |
|                         |  <b>DNGG 150402MFP-SK</b> | 4.76                    | 5.16            | <0.2       | ●                            | ●            |        |
|                         | <b>150404MFP-SK</b>  |                         |                 | <0.4       | ●                            | ●            |        |
| 仕上げ<br>Finishing        |  <b>TNGG 160401MFP-SK</b> | 9.525                   | 4.76            | 3.81       | <0.1                         | ●            | ●      |
|                         | <b>160402MFP-SK</b>  |                         |                 |            | <0.2                         | ●            | ●      |
|                         |  <b>TNGG 160404MFP-SK</b> | 9.525                   | 4.76            | 3.81       | <0.4                         | ●            | ●      |
|                         | <b>160408%-S</b>   |                         |                 |            | 0.2                          | ●            |        |
|                         | <b>160404%-S</b>   |                         |                 |            | 0.4                          | ●            |        |
|                         | <b>160408%-S</b>   |                         |                 |            | 0.8                          | ●            |        |








## PCLN-FF型 (オフセットなし Without Offset) (外径・端面加工 External / Facing)



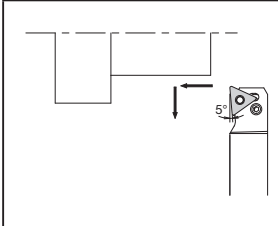
・本図は右勝手(R)を示す Right-hand Shown

横すくい角: -6°  
Traverse rake angle  
切刃傾き角: -6°  
Cutting edge inclination angle

### ホルダ寸法 Toolholder dimensions

| 型番<br>Description        | 在庫<br>Stock | 寸法(mm)<br>Dimension(mm) |    |     |    |    |   | 基準<br>コーナR<br>Std. Corner-R<br>(rε) | 部品 Spare Parts  |   |   |  |   |   | 適合チップ<br>Applicable Inserts   |
|--------------------------|-------------|-------------------------|----|-----|----|----|---|-------------------------------------|---|---|---|--|---|---|---|
|                          |             | H1=h                    | B  | L1  | L2 | F1 | S |                                     | レバー<br>Lever  | ロックスクリュー<br>Lock Screw  | シート<br>Shim   | シムピン<br>Shim Pin   | ポンチ<br>Punch  | レンチ<br>Wrench   |   |
| <b>PCLNR 1620JX-12FF</b> | ●           | 16                      | 20 | 120 | 26 | 20 | 0 | 0.8                                 |  |  |  |  |  |  |  |
| <b>2020JX-12FF</b>       | ●           | 20                      |    |     |    |    |   |                                     |   |   |   |  |   |   |   |








## PTLN-FF型 (オフセットなし Without Offset) (外径・引き端面加工 External / Up facing)



・本図は右勝手(R)を示す Right-hand Shown

横すくい角: -6°  
Traverse rake angle  
切刃傾き角: -6°  
Cutting edge inclination angle

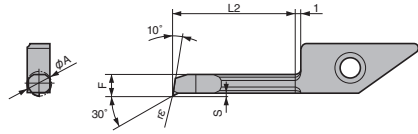
### ホルダ寸法 Toolholder dimensions

| 型番<br>Description        | 在庫<br>Stock | 寸法(mm)<br>Dimension(mm) |    |     |    |    |   | 基準<br>コーナR<br>Std. Corner-R<br>(rε) | 部品 Spare Parts  |   |   |  |   |   | 適合チップ<br>Applicable Inserts   |
|--------------------------|-------------|-------------------------|----|-----|----|----|---|-------------------------------------|---|---|---|--|---|---|---|
|                          |             | H1=h                    | B  | L1  | L2 | F1 | S |                                     | レバー<br>Lever  | ロックスクリュー<br>Lock Screw  | シート<br>Shim   | シムピン<br>Shim Pin   | ポンチ<br>Punch  | レンチ<br>Wrench   |   |
| <b>PTLNR 1620JX-16FF</b> | ●           | 16                      | 20 | 120 | 24 | 20 | 0 | 0.8                                 |  |  |  |  |  |  |  |
| <b>2020JX-16FF</b>       | ●           | 20                      |    |     |    |    |   |                                     |   |   |   |  |   |   |   |

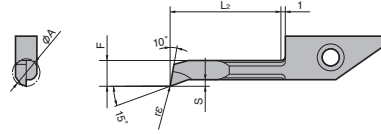
・コーナR (rε) = 1.6mm以上のチップをご使用の際は、被削材とシートの干渉防止の為、※印のシートを別途ご購入の上ご使用下さい。  
When using inserts whose corner R(rε) is larger than 1.6mm, please purchase a shim with \* mark and use it in order to prevent workpiece and shim from interfering each other.

●: 標準在庫 ●: Standard Stock

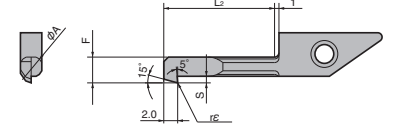
## ● VNB-S 型



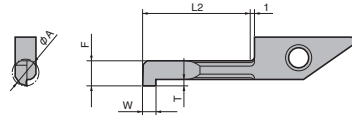
## ● VNB 型



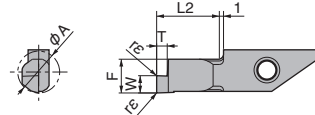
## ● VNB-T 型



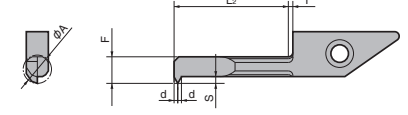
## ● VNG 型



## ● VNFG 型



## ● VNT 型



・本図は右勝手(R)を示す Right-hand Shown

## ● VNB-S型(内径加工) (Boring) [コーナR(rε)マイナス公差] (Corner-R (rε) of minus tolerance)

| 型番<br>Description   | 最小加工径<br>Min. Bore Dia.   | 寸法(mm)<br>Dimension |      |      | PR1225 |
|---|---|---------------------|------|------|--------|
|   |   | φA                  | L2   | S    |        |
| VNBR 0103-005S<br>0105-005S<br>01503-005S<br>01505-005S<br>0206-005S<br>025075-005S<br>0311-005S<br>03515-005S<br>0411-005S | 1.0   | 3                   | 0.2  | 0.05 | ●      |
|   |   | 5                   |      |      |        |
|   |   | 3                   |      |      |        |
|   | 1.5   | 5                   |      |      |        |
|   |   | 6                   | 0.25 |      |        |
|   | 2.0   | 7.5                 | 0.4  |      |        |
|   |   | 11                  | 0.4  |      |        |
|   | 3.0   | 15                  | 0.5  |      |        |
|   |   | 11                  | 0.5  |      |        |
| 4.0   | 20  | 0.5                 |      |      |        |
|   | VNBR 01505-01S<br>0206-01S<br>025075-01S<br>0311-01S<br>03515-01S<br>0411-01S<br>0420-01S | 5                   | 0.2  | 0.1  | ●      |
| 6   |   | 0.25                |      |      |        |
| 7.5   |   | 0.4                 |      |      |        |
| 11  |   | 0.4                 |      |      |        |
| 15  |   | 0.5                 |      |      |        |
| 4.0   | 11  | 0.5                 |      |      |        |
|   | 20  | 0.5                 |      |      |        |
| VNBR 0411-02S<br>0420-02S   | 4.0   | 11                  | 0.5  | 0.2  | ●      |
|   |   | 20                  |      |      |        |

## ● VNB型(内径加工) (Boring)

| 型番<br>Description   | 最小加工径<br>Min. Bore Dia.   | 寸法(mm)<br>Dimension |      |   | PR1225 |     |   |
|---|---|---------------------|------|---|--------|-----|---|
|   |   | φA                  | L2   | S |        |     |   |
| VNBR 0206-003<br>0311-003<br>0411-003<br>0420-003<br>0511-003<br>0520-003<br>0620-003<br>0630-003               | 2.0   | 6                   | 0.03 | ● |        |     |   |
|   |   | 11                  |      |   |        |     |   |
|   | 3.0   | 11                  |      |   |        |     |   |
|   |   | 20                  |      |   | 0.5    |     |   |
|   | 4.0   | 11                  |      |   | 0.7    |     |   |
|   |   | 20                  |      |   | 1.0    |     |   |
|   | 5.0   | 20                  |      |   | 1.0    |     |   |
|   |   | 30                  |      |   | 1.0    |     |   |
|   | VNBR 0206-01<br>0311-01<br>0411-01<br>0420-01<br>0511-01<br>0520-01<br>0620-01<br>0630-01 | 2.0                 |      |   | 6      | 0.1 | ● |
|   |   |                     |      |   | 11     |     |   |
| 3.0   |   | 11                  | 0.5  |   |        |     |   |
|   |   | 20                  | 0.7  |   |        |     |   |
| 4.0   |   | 20                  | 1.0  |   |        |     |   |
|   |   | 30                  | 1.0  |   |        |     |   |
| 5.0   |   | 20                  | 1.0  |   |        |     |   |
|   | 30  | 1.0                 |      |   |        |     |   |
| VNBR 0206-02<br>0311-02<br>0411-02<br>0420-02<br>0511-02<br>0520-02<br>0620-02<br>0630-02<br>0720-02<br>0730-02 | 2.0   | 6                   | 0.2  | ● |        |     |   |
|   |   | 11                  |      |   |        |     |   |
|   | 3.0   | 11                  |      |   | 0.5    |     |   |
|   |   | 20                  |      |   | 0.7    |     |   |
|   | 4.0   | 20                  |      |   | 1.0    |     |   |
|   |   | 30                  |      |   | 1.0    |     |   |
|   | 5.0   | 20                  |      |   | 1.0    |     |   |
|   |   | 30                  |      |   | 1.0    |     |   |

## ● VNB-T型(引き加工) (Back boring)

| 型番<br>Description                   | 最小加工径<br>Min. Bore Dia. | 寸法(mm)<br>Dimension |     |     | PR1225 |
|-------------------------------------|-------------------------|---------------------|-----|-----|--------|
|                                     |                         | φA                  | L2  | S   |        |
| VNBTR 0411-01<br>0420-01<br>0511-01 | 4                       | 11                  | 1.0 | 0.1 | ●      |
|                                     |                         | 20                  |     |     |        |
|                                     | 5                       | 11                  |     |     |        |
| 20                                  |                         |                     |     |     |        |

## ● VNG型(内径溝入れ) (Internal grooving)

| 型番<br>Description                  | 最小加工径<br>Min. Bore Dia. | 寸法(mm)<br>Dimension |        |     |     | PR1225 |
|------------------------------------|-------------------------|---------------------|--------|-----|-----|--------|
|                                    |                         | φA                  | W±0.03 | rε  | L2  |        |
| VNGR 0410-11<br>0420-11<br>0510-11 | 4                       | 1.0                 | 0.05   | 11  | 0.8 | ●      |
|                                    |                         | 2.0                 |        |     |     |        |
|                                    | 5                       | 1.0                 |        |     |     |        |
| 2.0                                |                         | 1.0                 |        |     |     |        |
| 0520-11<br>0610-20                 | 6                       | 1.0                 | 20     | 1.8 | ●   |        |
|                                    |                         | 2.0                 |        |     |     |        |
| 0620-20<br>0710-20                 | 7                       | 1.0                 | 20     | 2.0 | ●   |        |
|                                    |                         | 2.0                 |        |     |     |        |

・取り付けホルダ寸法の詳細は総合カタログをご参照下さい。  
For details of dimension, please refer to the General Catalogue.

## ● VNFG型(内径端面溝入れ) (Internal face grooving)

| 型番<br>Description                   | 端面溝外径φA<br>Face Grooving Dia. |          | 寸法(mm)<br>Dimension |      |    |     | PR1225 |
|-------------------------------------|-------------------------------|----------|---------------------|------|----|-----|--------|
|                                     | MIN.                          | MAX.     | W±0.03              | rε   | L2 | T   |        |
| VNFGR 0810-10<br>0820-10<br>0830-10 | 8<br>(0)                      | ∞<br>(∞) | 1.0                 | 0.05 | 10 | 2.0 | ●      |
|                                     |                               |          | 2.0                 |      |    |     |        |
|                                     |                               |          | 3.0                 |      |    |     |        |

## ● VNT型(内径ねじ切り:山角度60°) (Internal threading)

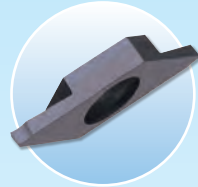
| 型番<br>Description     | 最小下穴径<br>Min. Bore Dia. | 寸法(mm)<br>Dimension |      | PR1225 |
|-----------------------|-------------------------|---------------------|------|--------|
|                       | φA                      | L2                  | rε   |        |
| VNTR 045-11<br>060-11 | 4.5                     | 11                  | 0.05 | ●      |
|                       | 6.0                     |                     |      |        |

●: 標準在庫 ●: Standard Stock

# 突切り・あとびき・ねじ切り加工が1本のホルダで可能

Applicable to cut-off, back turning and threading with one toolholder

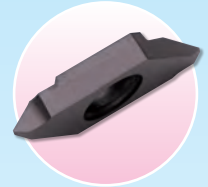
# KTKF型



突切りTKF型  
TKF for Cut-off

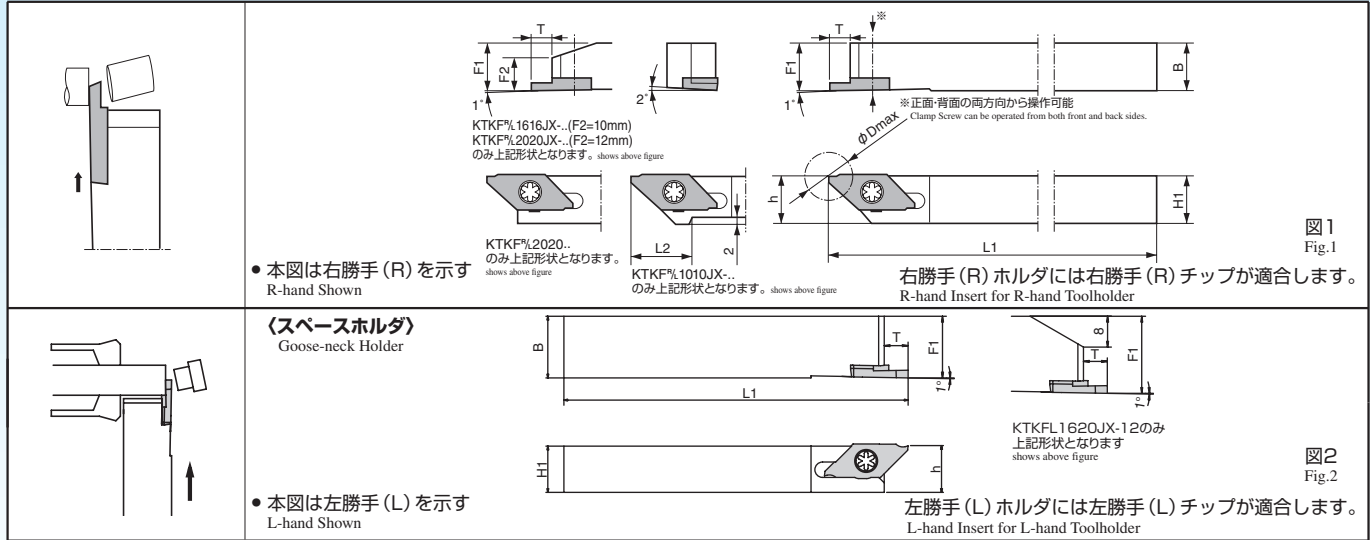


あとびきTKFB型  
TKFB for back Turning



ねじ切りTKFT型  
TKFT for Threading

## KTKF型



## ●ホルダ寸法 Toolholder Dimension

| 型番<br>Description   | 在庫<br>Stock |   | 寸法 (mm)<br>Dimension |    |     |    |    |        | 形状<br>Shape | 部品 Spare Parts        |            | 適合チップ<br>Applicable Inserts                          |
|---|-------------|---|----------------------|----|-----|----|----|--------|-------------|-----------------------|------------|--|
|   | R           | L | H1=h                 | B  | L1  | L2 | F1 | T      |             | クランプスクリュー Clamp Screw | レンチ Wrench |  |
| KTKF% 1010JX-12<br>1212JX-12<br>1616JX-12<br><b>NEW</b> 2020JX-12 | ●           | ● | 10                   | 10 | 120 | 15 | 10 | 6      | 図1<br>Fig.1 | SB-4590TRWN           | LTW-10S    | TKF12% ...<br>TKF_12% ...                            |
|   | ●           | ● | 12                   | 12 |     | -  | 12 |        |             |                       |            |  |
|   | ●           | ● | 16                   | 16 |     | -  | 16 |        |             |                       |            |  |
|   | ●           | ● | 20                   | 20 |     | -  | 20 |        |             |                       |            |  |
| KTKF% 1010JX-16<br>1212JX-16<br>1616JX-16<br><b>NEW</b> 2020JX-16 | ●           | ● | 10                   | 10 | 120 | 20 | 10 | 8      | 図1<br>Fig.1 | SB-4590TRWN           | LTW-10S    | TKF16% ...<br>TKF_16% ...                            |
|   | ●           | ● | 12                   | 12 |     | -  | 12 |        |             |                       |            |  |
|   | ●           | ● | 16                   | 16 |     | -  | 16 |        |             |                       |            |  |
|   | ●           | ● | 20                   | 20 |     | -  | 20 |        |             |                       |            |  |
| KTKF% 1212F-12<br>1212F-16  | ●           | ● | 12                   | 12 | 85  | -  | 12 | 6<br>8 | 図1<br>Fig.1 | SB-4590TRWN           | LTW-10S    | TKF12% ... , TKF_12% ...<br>TKF16% ... , TKF_16% ... |
|   | ●           | ● | 12                   | 12 |     | -  | 12 |        |             |                       |            |  |
| KTKFL 1216JX-12<br>1620JX-12                                      | ●           | ● | 12                   | 16 | 120 | -  | 16 | 6      | 図2<br>Fig.2 | SB-4590TRWN           | LTW-10S    | TKF12L ...<br>TKF_12L ...                            |
|   | ●           | ● | 16                   | 20 |     | -  | 20 |        |             |                       |            |  |

・T寸法：ホルダ面から刃先までの距離を示します。実際の加工径は、**14**参照。

Dimension T shows the distance from the Toolholder to the cutting edge. For actual cutting diameter, see page 14

注) -12タイプホルダの加工径 ( $\phi$  Dmax) はチップの溝幅により異なります。Cutting diameters of -12 type toolholders ( $\phi$ Dmax) are different depending on the insert grooving width.

## 突切り TKF型 TKF for Cut-off

### ●適合チップ Applicable Inserts

| 形状<br>Shape<br>勝手付きチップは右勝手 (R) を示す<br>Handed Insert Shows R-hand. | 型番<br>Description | 寸法 (mm)<br>Dimension |              |              |   |     |          | 角度 (°)<br>Angle<br>$\theta$ | MEGACOAT NANO |   | MEGACOAT |   | 適合ホルダ<br>Applicable Toolholders |
|---|-------------------|----------------------|--------------|--------------|---|-----|----------|-----------------------------|---------------|---|----------|---|---------------------------------|
|   |                   | W                    | $\phi$ D max | r $\epsilon$ | T | H   | $\phi$ d |                             | PR1425        |   | PR1225   |   |                                 |
|   |                   |                      |              |              |   |     |          |                             | R             | L | R        | L |                                 |
| 右リード角付き<br>Right lead angle                                       | TKF12% 050-S-16DR | 0.5                  | 5            | 0.03         | 3 | 8.7 | 5        | 16°                         | ●             | ● | ●        | ● | KTKF%<br>...12                  |
|   | 070-S-16DR        | 0.7                  | 8            |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
|   | 100-S-16DR        | 1.0                  | 12           |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
|   | 125-S-16DR        | 1.25                 | 12           |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
|   | 150-S-16DR        | 1.5                  | 12           |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
|   | 200-S-16DR        | 2.0                  | 12           |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
| 右リード角付き<br>Right lead angle                                       | TKF12% 050-S      | 0.5                  | 5            | 0.03         | 3 | 8.7 | 5        | 0°                          | ●             | ● | ●        | ● | KTKF%<br>...12                  |
|   | 070-S             | 0.7                  | 8            |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
|   | 100-S             | 1.0                  | 12           |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
|   | 125-S             | 1.25                 | 12           |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
|   | 150-S             | 1.5                  | 12           |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
|   | 200-S             | 2.0                  | 12           |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
| 右リード角付き 刃先強化型<br>Right lead angle Tough Edge                      | TKF12% 100-T-16DR | 1.0                  | 12           | 0.08         | 3 | 8.7 | 5        | 16°                         | ●             | ● | ●        | ● | KTKF%<br>...12                  |
|   | 150-T-16DR        | 1.5                  |              |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |
|   | 200-T-16DR        | 2.0                  |              |              |   |     |          |                             | ●             | ● | ●        | ● |                                 |

| 形状<br>Shape<br>勝手付きチップは右勝手 (R) を示す<br>Handed Insert Shows R-hand. | 型番<br>Description  | 寸法 (mm)<br>Dimension |           |      |   |     |    |     |        | 角度 (°)<br>Angle | MEGACOAT<br>NANO |   | MEGACOAT       |  | 適合<br>ホルダ<br>Applicable<br>Toolholders |
|---|--------------------|----------------------|-----------|------|---|-----|----|-----|--------|-----------------|------------------|---|----------------|--|--|
|   |                    | W                    | φD<br>max | rε   | T | H   | φd | θ   | PR1425 |                 | PR1225           |   |                |  |  |
|   |                    |                      |           |      |   |     |    |     | R      |                 | L                | R | L              |  |  |
| 刃先強化型<br>Tough Edge   | TKF12% 100-T       | 1.0                  | 12        | 0.08 | 3 | 8.7 | 5  | 0°  | ●      | ●               | ●                | ● | KTKF%<br>...12 |  |  |
|   | TKF12% 150-T       | 1.5                  |           |      |   |     |    |     | ●      | ●               | ●                | ● |                |  |  |
|   | TKF12% 200-T       | 2.0                  |           |      |   |     |    |     | ●      | ●               | ●                | ● |                |  |  |
| 右リード角付き<br>Right lead angle                                       | TKF12% 050-NB-20DR | 0.5                  | 5         | 0    | 3 | 8.7 | 5  | 20° | ●      | ●               |                  |   | KTKF%<br>...12 |  |  |
|   | TKF12% 070-NB-20DR | 0.7                  | 8         |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |
|   | TKF12% 100-NB-20DR | 1.0                  | 12        |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |
|   | TKF12% 150-NB-20DR | 1.5                  |           |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |
|   | TKF12% 200-NB-20DR | 2.0                  |           |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |
| フレカなし<br>Without Chipbreaker                                      | TKF12% 050-NB      | 0.5                  | 5         | 0    | 3 | 8.7 | 5  | 0°  | ●      | ●               |                  |   | KTKF%<br>...12 |  |  |
|   | TKF12% 070-NB      | 0.7                  | 8         |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |
|   | TKF12% 100-NB      | 1.0                  | 12        |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |
|   | TKF12% 150-NB      | 1.5                  |           |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |
|   | TKF12% 200-NB      | 2.0                  |           |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |
| 右リード角付き<br>Right lead angle                                       | TKF16% 150-S-16DR  | 1.5                  | 16        | 0.05 | 4 | 9.5 | 5  | 16° | ●      | ●               | ●                | ● | KTKF%<br>...16 |  |  |
|   | TKF16% 200-S-16DR  | 2.0                  |           |      |   |     |    |     | ●      | ●               | ●                | ● |                |  |  |
| 右リード角付き<br>Right lead angle                                       | TKF16% 150-S       | 1.5                  | 16        | 0.05 | 4 | 9.5 | 5  | 0°  | ●      | ●               | ●                | ● | KTKF%<br>...16 |  |  |
|   | TKF16% 200-S       | 2.0                  |           |      |   |     |    |     | ●      | ●               | ●                | ● |                |  |  |
| 右リード角付き 刃先強化型<br>Right lead angle Tough Edge                      | TKF16% 150-T-16DR  | 1.5                  | 16        | 0.08 | 4 | 9.5 | 5  | 16° | ●      | ●               | ●                | ● | KTKF%<br>...16 |  |  |
|   | TKF16% 200-T-16DR  | 2.0                  |           |      |   |     |    |     | ●      | ●               | ●                | ● |                |  |  |
| 刃先強化型<br>Tough Edge   | TKF16% 150-T       | 1.5                  | 16        | 0.08 | 4 | 9.5 | 5  | 0°  | ●      | ●               | ●                | ● | KTKF%<br>...16 |  |  |
|   | TKF16% 200-T       | 2.0                  |           |      |   |     |    |     | ●      | ●               | ●                | ● |                |  |  |
| 右リード角付き・フレカなし<br>Right lead angle Without Chipbreaker             | TKF16% 150-NB-20DR | 1.5                  | 16        | 0    | 4 | 9.5 | 5  | 20° | ●      | ●               |                  |   | KTKF%<br>...16 |  |  |
|   | TKF16% 200-NB-20DR | 2.0                  |           |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |
| フレカなし<br>Without Chipbreaker                                      | TKF16% 150-NB      | 1.5                  | 16        | 0    | 4 | 9.5 | 5  | 0°  | ●      | ●               |                  |   | KTKF%<br>...16 |  |  |
|   | TKF16% 200-NB      | 2.0                  |           |      |   |     |    |     | ●      | ●               |                  |   |                |  |  |

・リード角 (前切刃角度: θ) はホルダ取付時の角度を示します。Lead angle (front cutting edge angle: θ) indicates the angle when a toolholder is attached.

・チップの加工径 (φDmax) は下図のように刃先先端がワーク中心まで進んだ時の加工径を示します。φDmax indicates the cutting diameter of the insert with top of the cutting edge progresses to the center.

## ■ チップの加工径 φDmaxについて Insert Cutting Diameter Dmax

### メインスピンドルのみを使用する場合

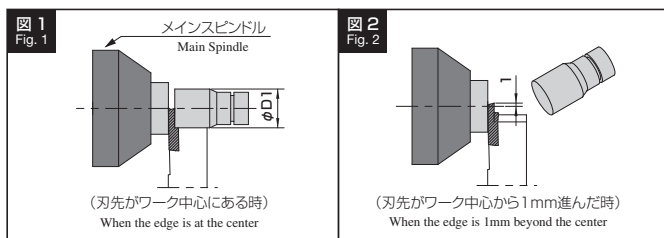
When Using Main Spindle Only

切断側ワーク最大加工径φD1 (図-1)はφD1=φDmaxとなります。

プログラム上、図-2の様に刃先が中心を越えてもワークが落ちているので、チップとワークの干渉は有りません。

(チップとワーク最大加工径のクリアランスは半径値で0.2mm有ります)

Workpiece max. D1=Dmax. Even if the cutting edge runs beyond the center line, the insert does not contact the workpiece, since the workpiece falls off. (The clearance between the insert and the work is 0.2mm)



### メインスピンドルとサブスピンドルで同時にワークを掴み、加工する場合

When using both Main and Sub Spindle

この加工では刃先がワーク中心まで達してもワークが落ちない為、中心を越えて刃先が進むとチップがワークと干渉しますので、最大加工径が変わります。

例: プログラム上、図-4の様に刃先がワーク中心から1mm進むように設定されている場合

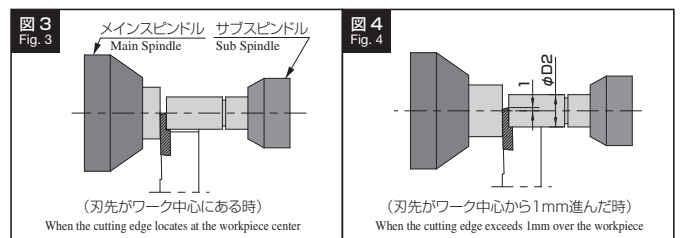
切断側ワーク最大加工径φD2 (図-4)はφD2=(φDmax-1mm×2) (mm)となります。

(チップとワーク最大加工径のクリアランスは半径値で0.2mm有ります)

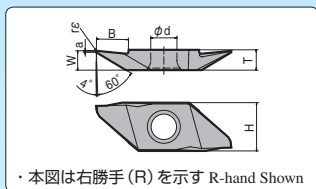
Workpiece max. D2=Dmax-(Programmed distance beyond the center) × 2

In this case, when the cutting edge runs beyond the center line, the insert will contact the workpiece, since the workpiece does not fall off. Therefore the programmed distance beyond the center must be considered.

When the cutting edge is programmed to run 1mm beyond the center, [D2=Dmax-1mm×2]. (Max. clearance between insert and workpiece is 0.2mm in radius.)



## あとびき TKFB型 TKFB for back Turning

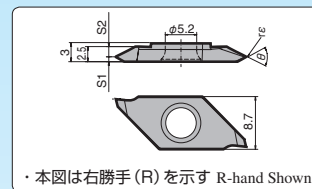
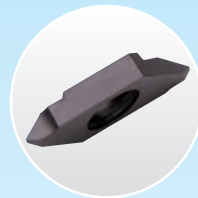


・本図は右勝手 (R) を示す R-hand Shown

| 型番<br>Description | 寸法 (mm)<br>Dimension |      |     |       |     |     |     | MEGA<br>NANO | MEGA<br>COAT | 適合<br>ホルダ<br>Applicable<br>Toolholders |
|-------------------|----------------------|------|-----|-------|-----|-----|-----|--------------|--------------|--|
|                   | W                    | a    | B   | rε    | T   | H   | φd  |              |              |  |
| TKFB 12R15005M    | 1.5                  | 0.25 | 2.6 | <0.05 | 3.0 | 8.7 | 5.2 | ●            | ●            | KTKFR<br>...12                         |
| 12R28005M         | 2.8                  | 0.3  | 4.6 | <0.05 |     |     |     |              |              |  |
| 12R28010M         |                      |      |     | <0.1  |     |     |     |              |              |  |
| TKFB 16R38005M    | 3.8                  | 0.3  | 6.3 | <0.05 | 4.0 | 9.5 | 5.2 | ●            | ●            | KTKFR<br>...16                         |
| 16R38010M         |                      |      |     | <0.1  |     |     |     |              |              |  |
| TKFB 12L28005MR   | 2.8                  | 0.3  | 4.6 | <0.05 | 3.0 | 8.7 | 5.2 | ●            | ●            | KTKFL<br>...12                         |
| 12L28010MR        |                      |      |     | <0.1  |     |     |     |              |              |  |
| TKFB 16L38005MR   | 3.8                  | 0.3  | 6.3 | <0.05 | 4.0 | 9.5 | 5.2 | ●            | ●            | KTKFL<br>...16                         |
| 16L38010MR        |                      |      |     | <0.1  |     |     |     |              |              |  |

・コーナー R (rε) 寸法が不等号 (例: <0.05, <0.1, <0.2 等) で表示されていますチップは、コーナー R (rε) がマイナス公差の製品を示します。  
Inserts with corner R(rε) dimension expressed in less than sign (e.g.<0.05, <0.1, <0.2, etc.) indicate models with minus tolerance for corner R (rε).

## ねじ切り TKFT型 TKFT for Threading

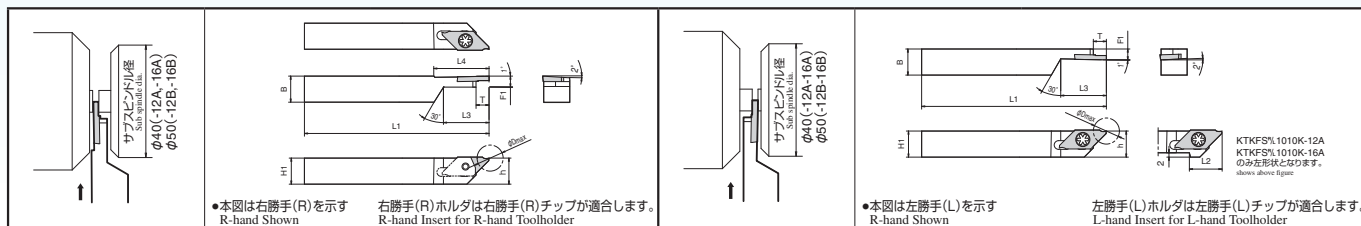


・本図は右勝手 (R) を示す R-hand Shown

| 型番<br>Description | 適用<br>ねじ<br>Applicable<br>Thread | ピッチ<br>Pitch |               | 寸法 (mm)<br>Dimension |      |     | 角度 (°)<br>Angle<br>θ | MEGA<br>NANO | MEGA<br>COAT | 適合<br>ホルダ<br>Applicable<br>Toolholders |
|-------------------|----------------------------------|--------------|---------------|----------------------|------|-----|----------------------|--------------|--------------|--|
|                   |                                  | mm           | 山/inch<br>TPI | rε                   | S1   | S2  |                      |              |              |  |
| TKFT 12RA6000     | M<br>UN                          | 0.2~0.6      | 64~48         | Max 0.05             | 0.4  | 2.1 | 60°                  | ●            | ●            | KTKFR<br>...12                         |
| 12RB6000          |                                  |              |               | フラット Flat            | 2.1  | 0.4 |                      |              |              |  |
| 12RA60005         |                                  | 0.5~1.25     | 48~24         | 0.05                 | 0.8  | 1.7 |                      |              |              |  |
| 12RB60005         |                                  |              |               | 1.7                  | 0.8  |     |                      |              |              |  |
| 12RN6001          | 1~1.5                            | 24~18        | 0.1           | 1.25                 | 1.25 | ●   | ●                    |              |              |  |
| TKFT 12RA55005    | G,R                              | -            | 40~16         | 0.05                 | 0.8  | 1.7 | 55°                  | ●            | ●            | KTKFL<br>...12                         |
| 12RB55005         | W                                |              |               | 1.7                  | 0.8  |     |                      |              |              |  |
| TKFT 12LA6000     | M<br>UN                          | 0.2~0.6      | 64~48         | Max 0.05             | 2.1  | 0.4 | 60°                  | ●            | ●            | KTKFL<br>...12                         |
| 12LB6000          |                                  |              |               | フラット Flat            | 0.4  | 2.1 |                      |              |              |  |
| 12LA60005         |                                  | 0.5~1.25     | 48~24         | 0.05                 | 0.8  | 1.7 |                      |              |              |  |
| 12LB60005         |                                  |              |               | 0.8                  | 1.7  |     |                      |              |              |  |
| 12LN6001          | 1~1.5                            | 24~18        | 0.1           | 1.25                 | 1.25 | ●   | ●                    |              |              |  |
| TKFT 12LA55005    | G,R                              | -            | 40~16         | 0.05                 | 1.7  | 0.8 | 55°                  | ●            | ●            | KTKFL<br>...12                         |
| 12LB55005         | W                                |              |               | 0.8                  | 1.7  |     |                      |              |              |  |

## 突切り サブスピンドル対応 Cut-off with sub spindle

### KTKFS型 (サブスピンドル対応小径突切り用) KTKFS for small diameter workpiece cut-off with sub spindle



・本図は右勝手 (R) を示す R-hand Shown 右勝手 (R) ホルダは右勝手 (R) チップが適合します。 R-hand Insert for R-hand Toolholder

・本図は左勝手 (L) を示す R-hand Shown 左勝手 (L) ホルダは左勝手 (L) チップが適合します。 L-hand Insert for L-hand Toolholder

### ●ホルダ寸法 Toolholder Dimension

| 型番<br>Description   | 在庫<br>Stock |   | 加工径<br>Cutting Dia. | 寸法 (mm)<br>Dimension |    |     |    |    |    |     |    |            |                          | 部品 Spare Parts |  | 適合チップ<br>Applicable Inserts |
|---------------------|-------------|---|---------------------|----------------------|----|-----|----|----|----|-----|----|------------|--------------------------|----------------|--|-----------------------------|
|                     | R           | L |                     | φDmax                | H1 | B   | L1 | L2 | L3 | *L4 | F1 | T          | クランプスクリュー<br>Clamp Screw | レンチ<br>Wrench  |  |                             |
| KTKFS%<br>1010K-12A | ●           | ● | 6 ~ 12              | 10                   | 10 | 120 | 15 | 22 | 26 | 5   | 6  | SB-4050TRN | LTW-10S                  | TKFS12%        |  |                             |
| 1212F-12A           | ●           | ● |                     | 12                   | 12 | 85  | -  |    |    |     |    |            |                          |                |  |                             |
| 1212K-12B           | ●           | ● |                     | 120                  | -  | 26  |    |    |    |     |    |            |                          |                |  |                             |
| KTKFS%<br>1010K-16A | ●           | ● | 14 ~ 16             | 10                   | 10 | 120 | 20 | 22 | 30 | 5   | 8  | SB-4050TRN | LTW-10S                  | TKFS16%        |  |                             |
| 1212F-16A           | ●           | ● |                     | 12                   | 12 | 85  | -  |    |    |     |    |            |                          |                |  |                             |
| 1212K-16B           | ●           | ● |                     | 120                  | -  | 26  |    |    |    |     |    |            |                          |                |  |                             |

・T寸法: ホルダ面から刃先までの距離を示します。 Dimension T shows the distance from the Toolholder to the cutting edge.

・加工径 (φ Dmax) はチップの溝幅により異なります。 Cutting diameters (φDmax) are different depending on the insert grooving width.

※ L4 寸法は右勝手 (R) ホルダのみです。 L4 dimension is only for R-hand toolholders.

### ●適合チップ Applicable Inserts

| 形状<br>Shape<br>勝手付きチップは左勝手 (L) を示す<br>Handed Insert Shows L-hand. | 型番<br>Description | 寸法 (mm)<br>Dimension |        |      |     |     |     | 角度 (°)<br>Angle<br>θ | MEGACOAT<br>NANO |        | MEGACOAT |   |   |
|---|-------------------|----------------------|--------|------|-----|-----|-----|----------------------|------------------|--------|----------|---|---|
|   |                   | W                    | φD max | rε   | T   | H   | φd  |                      | PR1425           | PR1225 |          |   |   |
|   | TKFS12%<br>100-S  | 1.0                  | 6      | 0.05 | 2.2 | 8.7 | 4.4 | 0°                   | ●                | ●      | ●        | ● |   |
|   |                   | 150-S                | 1.5    |      |     |     |     |                      | 9                | ●      | ●        | ● | ● |
|   |                   | 200-S                | 2.0    |      |     |     |     |                      | 12               | ●      | ●        | ● | ● |
|   | TKFS16%<br>150-S  | 1.5                  | 14     | 0.05 | 2.2 | 9.5 | 4.4 |                      | ●                | ●      | ●        | ● |   |
|   |                   | 150-S                | 1.5    |      |     |     |     |                      | 14               | ●      | ●        | ● | ● |
|   |                   | 200-S                | 2.0    |      |     |     |     |                      | 16               | ●      | ●        | ● | ● |

・チップの加工径 (φ Dmax) は図 2 (14 ページ参照) のように刃先先端がワーク中心から 1mm 進んだ時の加工径を示します。 As shown in Fig 2 (of page 14), φDmax indicates the cutting diameter of inserts where the top of the cutting edge progresses 1mm from the center.  
・リード角 (前切刃角度: θ) はホルダ取付時の角度を示します。 Lead angle (front cutting edge angle: θ) indicates the angle when a toolholder is attached.

切削工具に関する技術的なご相談は

**0120-39-6369** ●受付時間 9:00~12:00・13:00~17:00  
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MAIL:tool.support@kyocera.jp 京セラ カスタマーサポートセンター

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